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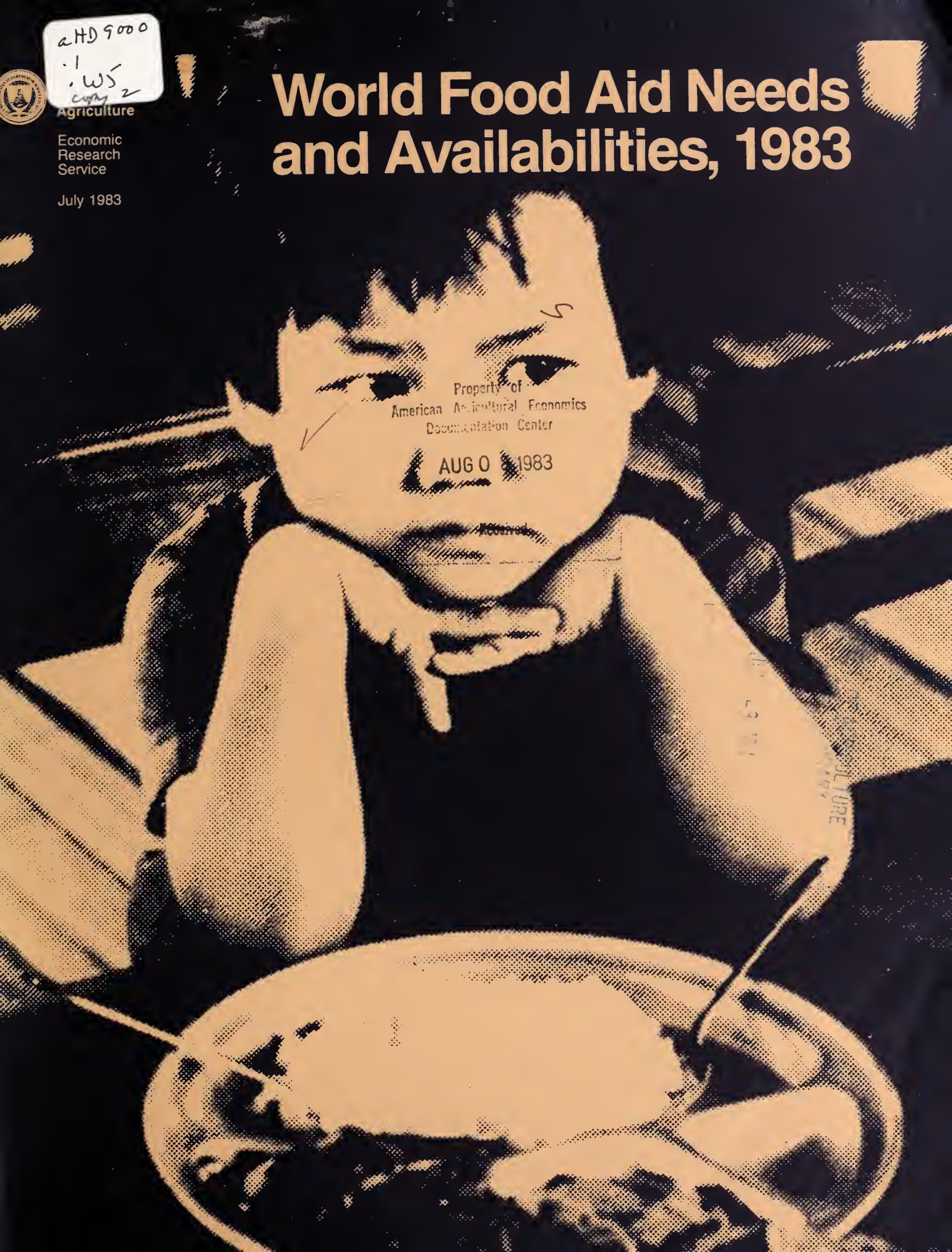

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FOREWORD

This year marks the eighth consecutive year in which the Economic Research Service (ERS) has prepared a major analysis to supplement international intelligence on global food aid needs. Earlier versions of this report, developed and directed by Patrick M. O'Brien (now ERS Deputy Associate Administrator), introduced coverage of world food production and food and financial situations in recipient countries. In its current version, the Food Aid Needs and Availabilities report retains the framework and methodology of earlier versions, while expanding on countries' food supplies and utilization and the effect of financial conditions on aid needs.

This report provides the Executive Branch and Congress with an assessment to help determine tentative fiscal 1984 food aid allocations and preliminary fiscal 1985 allocations within the budget of the United States. Although submission of this report satisfies the legislative mandate in Section 408(b) of Public Law 480, the report has increasingly served a wider purpose: to provide a detailed and aggregate look at world food supplies and food aid needs for program and policy officials within donor governments, analysts in international research organizations and universities, and private agencies involved in food donation.

The report includes discussion of (1) the world food situation and its implications for export availabilities; (2) the food and financial situations in the individual low-income countries, focusing on major food staples--cereals, roots and tubers, vegetable oils, pulses, and milk--and import requirements and aid needs for these staples; and (3) alternative methods of ranking aid needs for policy purposes.

For poorer countries beset by heavy debt and dwindling foreign exchange reserves, assessing financial conditions has become increasingly important to thoroughly appraising food aid needs. Therefore, slightly expanded treatment on the financial situation in these countries--including analysis of foreign exchange reserves, export earnings, import expenditures, and debt service obligations--occurs in country narratives and tables, as well as in "Financial Situation in the Low-Income Countries."

The low-income countries analyzed in this report were selected on the basis of their 1981 per capita gross national products and their food aid history. Countries were included if their per capita incomes were low enough--$795 or less--to qualify for concessional loan terms from the International Development Association. However, several countries meeting this criterion were excluded from the report because of their position as food exporters or their consistently large foreign exchange surpluses. By the same token, several countries not meeting this criterion were included in the report on the basis of their past dependence on food aid or the severity of their current food or financial problems.

Estimates of the magnitude of food aid needs in this document will be supplemented early this autumn by another ERS publication dealing with the timing of food aid deliveries to meet these needs. Crop and Food Aid Calendars--Africa will indicate when short supplies for major staple foods generally occur in African countries, and consequently when food aid shipments are best sent to redress these deficits. Similar volumes are planned for Asia and Latin America.

A note on units and terms: in the text and tables of this report, all tons are metric and all dollars are U.S. unless otherwise specified. Table totals may not add because of rounding. GNP denotes gross national product; GDP denotes gross domestic product.

Kevin J. Lanagan
Food Aid Analysis Coordinator

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The Division economists providing analysis for the report include: Richard Brown, Susan Buchanan, Mary Burfisher, Michael Cullen, Wayne Denney, Elizabeth Davis, John Dunmore, Gary Ender, Albert Evans, Amjad Gill, William Hall, Nadine Horenstein, Bradley Karmen, Michael Kurtzig, Miles Lambert, Rip Landes, John Link, Jan Lipson, Eileen Manfredi, Margaret Missiaen, Richard Nehring, Patrick O'Brien, John Parker, Peter Riley, Nydia Rivera-Sanchez, Leslie Ross, David Skully, David Stallings, Herbert Steiner, Paul Trapido, Charles Treakle, Ron Trostle, and Larry Witucki.

Deloris A. Midgette assumed primary responsibility for typing the report. Bernadine Holland drafted major portions of the tables and narratives. Mary Wright furnished statistical support for all analysis. Other statistical assistants and secretaries who helped prepare the report included Patricia Abrams, Greg Acton, Harriet Barlowe, Linda Beeler, Deveta Eatmon, Norma Giron, Lorraine Jamison, Linda Mitchell, Denise Morton, Rebekah Pearson, Mary Teymourian, Linda Turner, Victoria Valentine, and Alma Young.

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Approved by the World Agricultural Outlook Board

SUMMARY

The need for food aid to supplement domestic production and commercial imports in 1983/84 will continue at moderate to severe levels in most low-income countries.1/ Despite expected growth in cereal output of 15 million tons for the group, a 5.6 percent improvement over 1982/83, inexorable growth in population and declining financial health of these countries will swallow up nearly all of these gains. Just to maintain consumption at 1979-82 average levels, cereal food aid needs for low-income countries are forecast at 12.4 million tons (table 1). Adjusting for changes in per capita consumption and stock targets, these cereal aid needs represent a 5-percent increase over forecast needs in 1982/83.

Because caloric intake in many low-income countries will remain far below minimally prescribed levels, the amount of food required to improve diets will continue to be very high. Nutrition-based cereal aid needs for low-income countries are forecast at 32.8 million tons for 1983/84. An additional 2.7 million tons are estimated to be required in order to rebuild depleted stocks for food security purposes.

The following countries will need the largest absolute amounts of aid in 1983/84 to maintain recent consumption levels: Madagascar, Mozambique, Somalia, and Tanzania in Africa; Bangladesh and Vietnam in Asia; Lebanon in the Middle East; and Bolivia and Peru in Latin America. Because recent consumption levels are well below minimal caloric intake standards, large nutrition-based aid needs exist in several countries as well. Large populations or marked shortages in certain critical food categories cause Somalia in Africa, Bangladesh and India in Asia, and Ecuador in Latin America to head this list.

Per capita, those countries with the most pressing food-deficit problems, both in relation to recent intake trends and established dietary standards, are Somalia, Chad, Mauritania, Lesotho, and Swaziland. In Bolivia and Peru, per capita needs have intensified significantly since last year.

Considering in particular cereal aid needs, which comprise the majority of total food aid needs, several countries are expected once again to register the severe deficiencies that have become chronic during the past few years. In addition to the previously mentioned African nations, all of which experienced moderate to severe food shortages in 1982/83, Ghana, Kenya, and Sudan each will need in excess of 150,000 tons of cereal in 1983/84 to hold current intake standards. The magnitude of Egypt's forecast needs results from large concessional imports of cereals from the U.S. during the 1979-82 base period. Bangladesh and Vietnam could need over 1 million tons of cereals each, with Afghanistan also showing large status quo aid needs. In Latin America, status quo

1/ For a complete listing of countries covered, see table 1 and the Table of Contents.

Table 1.--Summary of forecast cereal import requirements and food aid needs to support consumption, status quo- and nutrition-based estimates

	1982/83 cereal imports	1983/84 import requirements		1983/84 aid needs		1984/85 import requirements		1984/85 aid needs	
		Status quo	Nutrition based	Status quo	Nutrition based	Status quo	Nutrition based	Status quo	Nutrition based
Africa and Middle East									
Angola	385	311	302	71	62	274	272	45	42
Benin	80	86	0	46	0	72	0	40	0
Burundi	19	0	8	0	8	1	36	1	36
Cameroon	210	183	302	0	119	171	297	0	101
Cape Verde	48	53	45	28	22	52	44	23	18
Central African Rep.	32	30	103	26	99	45	118	41	114
Chad	78	80	395	75	390	84	408	80	404
Comoros	29	30	62	18	50	30	63	24	58
Congo	75	81	83	16	18	73	75	0	0
Djibouti	40	36	NA	0	NA	36	NA	0	NA
Egypt	7,199	7,714	4,019	3,317	0	7,816	4,040	3,543	0
Equatorial Guinea	2	4	NA	3	NA	4	NA	2	NA
Ethiopia	270	532	2,354	450	2,272	599	2,457	520	2,378
Gambia	43	0	0	0	0	0	0	0	0
Ghana	185	247	538	166	458	212	520	134	442
Guinea	110	188	449	77	338	211	476	91	356
Guinea-Bissau	49	36	41	25	30	36	41	25	30
Kenya	140	318	1,080	215	977	568	1,302	462	1,197
Lebanon	619	613	769	77	232	626	787	144	304
Lesotho	215	325	263	259	197	197	162	131	96
Liberia	125	137	110	62	35	155	125	77	47
Madagascar	398	400	203	372	175	419	215	366	162
Malawi	35	27	160	0	132	74	205	40	171
Mali	130	165	780	129	743	142	788	107	753
Mauritania	180	162	208	116	162	163	211	100	147
Mauritius	138	148	137	12	1	151	139	3	0
Morocco	2,219	1,481	1,658	200	377	1,586	1,752	0	114
Mozambique	433	669	1,272	484	1,087	413	1,066	235	888
Niger	160	180	152	143	115	198	166	157	126
Rwanda	12	58	55	58	55	80	74	80	74
Senegal	420	350	477	0	68	325	461	0	6
Sierra Leone	120	77	58	27	7	80	61	29	9
Somalia	295	355	293	284	222	365	301	290	227
Sudan	292	224	501	224	501	258	543	258	543
Swaziland	73	113	105	95	87	71	70	55	49
Tanzania	372	450	816	394	759	605	969	550	915
Togo	55	61	135	44	118	45	125	25	105
Tunisia	940	957	723	0	0	1,013	768	0	0
Uganda	5	0	506	0	502	56	556	50	551
Upper Volta	65	38	300	6	267	46	313	15	281
Yemen Arab Republic	495	544	504	179	139	567	525	193	151
Yemen, PDR	225	221	252	21	52	227	259	29	60
Zaire	180	288	1,227	51	990	365	1,321	81	1,036
Zambia	233	275	569	73	368	105	455	0	197
Subtotal	17,428	18,247	22,014	7,837	12,234	18,616	22,566	8,046	12,188
Asia									
Afghanistan	0	125	144	101	121	172	189	152	169
Bangladesh	2,206	1,256	6,132	1,085	6,045	1,100	6,130	1,002	6,076
India	3,560	0	9,805	0	8,239	0	10,063	0	8,024
Indonesia	2,047	2,329	0	297	0	1,423	0	0	0
Kampuchea	85	123	253	94	224	95	232	67	204
Laos	50	55	63	0	0	20	34	0	0
Nepal	0	0	854	0	854	0	866	0	866
Pakistan	-900	0	0	0	0	0	0	0	0
Philippines	1,240	1,122	1,366	382	626	1,215	1,460	467	712
Sri Lanka	750	783	1,090	83	390	788	1,102	101	416
Vietnam	1,210	1,352	2,018	1,173	1,838	1,489	2,157	731	1,399
Subtotal	10,248	7,145	21,725	3,215	18,337	6,302	22,233	2,520	17,866
Latin America									
Bolivia	270	590	703	333	445	376	522	48	194
Colombia	537	517	0	0	0	625	17	99	0
Costa Rica	145	107	74	0	0	99	66	0	0
Dominican Republic	345	327	398	0	80	352	423	0	99
Ecuador	320	342	417	72	172	372	442	96	188
El Salvador	179	219	290	138	208	239	310	157	229
Guatemala	108	129	81	0	0	102	55	0	0
Haiti	206	221	449	94	321	226	458	103	335
Honduras	75	103	181	6	80	108	188	8	84
Jamaica	418	450	380	133	64	456	386	27	0
Nicaragua	7	40	0	0	0	56	13	3	0
Peru	1,553	1,320	1,645	559	884	1,198	1,546	58	406
Subtotal	4,158	4,365	4,618	1,335	2,254	4,209	4,426	599	1,535
Total	31,834	29,757	48,357	12,387	32,825	29,127	49,225	11,165	31,589

NA = Not available.

cereal aid needs for 1983/84 in Bolivia and Peru alone could be nearly 900,000 tons, while needs in El Salvador and Haiti each will be near the 100,000-ton level.

Expected cereal aid needs for 1983/84 in other countries sharply contrast with forecasts made last year. The drought that has held Southern Africa in its grip during the last few months will boost status quo cereal aid needs in Lesotho and Swaziland appreciably higher than expected a year ago. Pest infestations and drought in Mauritania and worsening financial conditions in Togo will raise these West African countries' cereal aid needs. Bolivia's severe drought and Jamaica's curtailed export earnings have lifted forecasts of their aid needs.

Not all of the changes are for the worse. Recovery from record crop losses last year has improved conditions in Morocco, reducing the forecast status quo import requirement for 1983/84 to almost half that called for last year. Better grain crops in Honduras and Laos could reduce import and aid needs next year in those countries as well.

Because of severely low per capita caloric intake, several countries are forecast to show high nutrition-based cereal aid needs in 1983/84. Some of these are countries expected to register high status quo cereal aid needs such as Bangladesh, Mozambique, Tanzania, and Vietnam. Others may show lower status quo needs due to chronically depressed dietary standards. In the Sahelian African countries of Chad, Mali, and Upper Volta, diets are restricted by severe food shortages. Repeated droughts, warfare, and refugee flows have constrained dietary standards in East African countries such as Ethiopia, Kenya, and Mozambique, where nutrition-based cereal aid needs are forecast to approach or exceed 1 million tons each in 1983/84.

The unrelenting pressure of India's massive population--currently estimated to comprise over 40 percent of the total population in the developing world--will create nutrition-based cereal aid needs estimated at 8.2 million tons for 1983/84. And in Uganda, Zaire, Bolivia, and Peru, traditional dependence on starchy root crops such as cassava and potatoes--which are less efficient suppliers of calories than cereals--results in forecasts of nutrition-based food aid needs ranging from roughly 500,000 to 1 million tons.

A few countries will register high cereal import requirements for 1983/84 but no aid needs. Tunisia, Yemen Arab Republic, Colombia, and the Dominican Republic are deemed capable of financing these cereal import needs with their own export earnings and foreign exchange reserves. Because their domestic food production is adequate, countries such as Pakistan, Nicaragua, and Gambia once again show no cereal import requirements or aid needs.

1984/85 Aid Needs

Some reduction is expected in the amount of food aid needed for low-income countries in 1984/85. Food production may increase marginally for the group, particularly if regions such as Southern Africa and Andean South America rebound from current drought-depressed output levels. Even given population gains, cereal import requirements could drop 2 percent in 1984/85 to 29.1 million tons without reducing average per capita consumption.

But the major cause for anticipated reductions in food aid needs in 1984/85 is forecast improvement in these countries' ability to purchase food. As the economies in developed countries recover from recession, their demand for raw materials should provide a welcome boost in export earnings and foreign exchange reserves for low-income countries. This would pave the way for low-income countries to import more food on a commercial basis, trimming the need for concessional food shipments other than those for emergency purposes. Cereal food aid needs are forecast at 11.2 million tons for 1984/85, almost 10 percent below the forecast for 1983/84.

Marginal production gains and improved financial conditions will not, however, erase the serious lack of adequate caloric content in the diets of many low-income countries. Nearly 50 million tons of cereals would have to be imported in 1984/85 by low-income countries to provide enough food for their diets that minimally adequate levels of caloric intake are attained.

WORLD FOOD SITUATION AND OUTLOOK

World food supplies in mid-1983 are record large in absolute terms. Reasons include high yields for key crops in major producing countries during 1982/83 and dampened demand for agricultural products during the past year. There were serious setbacks in South African corn, Australian wheat, and Indian rice crops, as well as a fourth consecutive poor harvest in the USSR. Still, global cereal production improved 3.4 percent over 1981/82 (table 3), helped by record wheat yields and a 2.2-percent gain in coarse grain output. Nevertheless, cereal production barely kept pace with world population growth in 1982/83 and fell short of the per capita record of 1978/79. For the developing countries as a group, the year actually marked a decline in per capita production.

Food Production Indicators

World demand for agricultural products during 1982/83 was affected by slow economic growth in industrialized nations, foreign exchange shortages in developing countries, and lower earnings for petroleum exporters. Reduced purchasing power resulting from these developments, coupled with a general slackening of growth in livestock industries, resulted in a world livestock industry too weak to absorb record world cereal supplies. World cereal trade fell 7.6 percent to just over 200 million tons, and global carryover stocks--concentrated in the United States, Canada, and Australia--are currently nearing 16 percent of global use, near last year's record (table 4).

Table 2.--Indices of world and regional food production

	Total food production							Per capita food production						
	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83
	(1969-71 = 100)							(1969-71 = 100)						
Developed countries	109	113	117	120	119	124	126	104	106	109	111	110	113	114
United States	113	118	119	125	118	131	132	106	110	110	114	107	117	117
Canada	117	119	122	118	121	131	139	108	109	110	107	107	115	121
Western Europe	107	109	116	119	124	121	125	103	105	111	114	119	115	119
Japan	97	106	105	104	94	96	98	90	97	95	94	84	85	86
Oceania	122	120	132	123	112	121	113	109	107	116	108	97	103	95
Rep. of South Africa	123	133	136	131	139	160	139	106	111	111	105	108	122	104
Centrally planned countries	119	118	127	126	123	124	130	108	106	113	110	106	106	110
USSR	115	114	123	114	111	108	114	109	106	115	105	101	98	103
Eastern Europe	121	122	127	125	122	125	128	116	116	120	117	114	116	118
P.R. China	124	121	133	146	143	148	157	110	106	115	125	120	123	129
Developing countries	120	125	131	130	133	140	141	104	105	108	104	104	107	105
East Asia 1/	132	136	145	145	149	157	162	115	116	120	118	118	122	122
South Asia	111	120	125	118	122	131	127	96	102	104	96	97	102	97
West Asia 2/	135	134	142	141	144	143	148	114	110	113	109	108	104	104
Africa 3/	111	109	114	115	118	120	123	94	91	92	89	89	88	88
Latin America 4/	125	131	137	141	145	153	154	108	110	112	113	113	116	115
World	115	118	124	125	124	128	131	103	104	107	106	104	105	105

Note: Production reported on a calendar year basis; production data shown here are combined with split- or commodity-marketing-year data to develop a complete supply-demand balance. For example, 1980 output is associated with 1980/81 trade and disappearance data.

1/ Includes Southeast Asia regions shown in table 3.
2/ Includes Middle East regions shown in table 3.
3/ Includes North Africa, Central Africa, and East Africa regions shown in table 3.
4/ Includes Central America, Venezuela, Brazil, Argentina, and other South America regions shown in table 3.

The absolute gains in food production were fairly well distributed across regions. Except for the drought-induced return to 1980/81 lows in South Africa, developed and centrally planned countries nearly all enjoyed gains in 1982/83 (table 2). Even in the developing-country regions, absolute gains were registered in all regions except South Asia, which showed a decline because of India's rice losses. But, in per capita terms, nearly all developing country regions failed to show improvement over last year. Over 36 million people were added to the population last year in these countries, outrunning the productive capacity of the countries' agricultural sectors. Even taking imports into account, 1982/83 per capita cereal consumption in developing countries failed to show improvement over 1981/82 (table 3).

Abundant global cereal stocks and low world prices normally should set the stage for a reversal of declining per capita consumption in medium- and low-income importing countries. But, because of severe limitations on the ability of developing regions to finance needed purchases, record-high cereal supplies unfortunately remained out of reach for many of the poorest countries in 1982/83. The mounting external debt-service bill of the low-income developing countries stood at an estimated $20.5 billion at the end of 1982--representing over one-quarter of total export earnings for those countries in the same year. Yet currency reserves were estimated to be $23.6 billion at the close of 1982--perilously close to the amount needed for debt servicing alone. Concessional financing was required to assist food-deficit countries in purchasing food. P.L. 480 assistance from the United States alone amounted to 3.78 million tons of grains and processed foods valued at $1.04 billion.

The outlook for 1983/84 world food supplies is very favorable. However, adequate world supplies will not translate into greater food availability in the strapped low-income countries. Wheat production and trade are expected to about equal this year's levels, and rice production should recover slightly if harvests improve in India. Running counter to these trends, coarse grain output could slip as much as 5 percent, due almost entirely to an anticipated 26-percent drop in U.S. production--the result of participation in the PIK acreage-limitation program in the United States 1/. Hoped-for improvement in world economic growth and real personal income in 1983 should at least prevent any lessening of cereal consumption and trade in 1983/84. Slightly higher world cereal consumption and trade, coupled with a forecast 2-percent drop in global cereal production, could force world carryover stocks down more than 20 million tons and firm world prices for major grains.

1/ Through the Payment-in-Kind Program (PIK) administered by the U.S. Department of Agriculture, participating farmers will be compensated with Government-held or reserve commodities for idling a portion of their cropland.

Table 3.--Total cereals: World production, consumption, and net imports 1/

Country/region	1980/81			1981/82			1982/83 2/			1983/84 2/		
	Production	Consumption	Net imports 3/	Production	Consumption	Net imports	Production	Consumption	Net imports 3/	Production	Consumption	Net imports 3/
	Million metric tons											
Developed countries	514	409	-121	576	417	-120	588	428	-110	515	432	-113
United States	268	170	-113	331	180	-109	337	190	-101			
Canada	41	23	-20	51	24	-25	54	24	-26			
EC	126	121	-4	123	119	-5	131	120	-8			
Other Western Europe	35	42	8	27	41	14	30	41	10			
South Africa	17	10	-4	11	11	-3	7	10	2			
Japan	10	35	24	10	35	23	10	35	23			
Oceania	17	7	-12	25	8	-16	14	7	-8			
Centrally planned countries	511	579	63	485	555	70	535	587	52	552	596	54
Eastern Europe	96	110	14	93	103	11	104	108	4			
USSR	181	220	35	154	199	45	170	203	33			
P.R. China	235	249	14	238	253	14	261	276	15			
Developing countries	403	451	49	430	480	50	419	480	58	440	500	59
Mexico/Central America	21	28	11	24	31	4	20	30	10			
Venezuela	2	3	2	1	4	3	1	4	2			
Brazil	31	36	4	33	36	4	33	36	4			
Argentina	29	11	-18	27	11	-15	31	11	-20			
Other South America	9	12	4	9	13	4	8	13	4			
North Africa/Middle East	53	79	25	53	83	29	55	86	30			
Central Africa	22	28	5	22	28	6	22	28	6			
East Africa	9	11	2	10	11	2	9	12	2			
South Asia	153	156	--	161	163	3	153	158	5			
Southeast Asia	33	29	-4	36	30	-6	35	31	-5			
East Asia	41	58	18	45	62	16	45	63	17			
Rest of world	6	5	0	6	6	0	6	6	0			
World total	1,434	1,444		1,491	1,452		1,542	1,495		1,507	1,528	

Note: Totals may not add because of rounding.

1/ Regional totals include some high-income developing countries not treated in this report.
2/ Forecast.
3/ A negative figure indicates net exports.

SOURCE: USDA/ERS.

Lower world stocks and higher prices will benefit a few food-exporting developing countries such as Pakistan and Indonesia. But those most dependent upon food imports will find it even more difficult to maintain even current caloric intake--much less improve dietary standards--as they struggle to free up enough cash for more expensive food purchases.

Even if prices remain stable in 1983/84, most poor countries will be less able to afford the same food purchases made in 1982/83. Thirty-eight low-income developing countries are expected to experience either no improvement or a deterioration in their balance of trade between 1982/83 and 1983/84, reflecting a growing inability to pay for imports with earnings from raw materials or manufactured products, and a greater dependence upon debt (table 9).

Yet this need to take on greater debt burdens just to maintain current nutritional requirements will occur at a time when debt is already acutely high. In 1983/84, developing countries will owe an estimated $22.3 billion, a full 9 percent higher than in the previous year. For a dozen low-income countries, their debt-service burden will equal more than half of total export earnings expected for the year. In Cape Verde and Sudan, scheduled debt-service payments already exceed what the countries can earn from exports.

Facing enlarging trade deficits and greater debt burdens, low-income countries cannot count on dipping into their cash reserves for relief. Currency reserves at the close of 1983 will be $23.3 billion--1 percent lower than in the previous year and only marginally higher than the $22.3 billion owed on debt. Countries such as the Dominican Republic, Vietnam, Morocco, Gambia, Liberia, Mali, and Zambia are forecast to have only enough foreign exchange reserves left by year's end to pay for 2 weeks' worth of merchandise and food imports. In a few critical cases--Benin, Senegal, Sudan, Tanzania, and Somalia--reserves' import coverage will amount to only a few days' worth. A full treatment of the serious financial condition of low-income developing countries appears in a later section.

Cereal Situation and Outlook

In cereals, the world in 1982/83 saw a second consecutive year of record production, led by gains in wheat and coarse grain. Total cereal production in the developing countries declined from last year, but almost all the decline was due to a drop in Indian rice output. Consequently, the cereal supply and demand situation for most of the developing countries is marked by large exportable supplies in food-producing countries and low international grain prices.

The total world grain harvest in 1982/83 is estimated at 1.54 billion tons, 3.4 percent above the previous year's record, reflecting alltime high output in many countries (table 3). Despite poor crops in Australia and South Africa, production in the developed countries was record large--with notable

increases in the United States, Canada, and Western Europe. Output in the centrally planned countries was the second largest ever because of record production in China and Eastern Europe; however, the USSR experienced its fourth consecutive poor crop. If India is excluded from the developing countries, cereal production in this group remained at last year's high level.

The USSR and Eastern Europe cut their coarse grain imports almost in half from a year earlier. The USSR switched to wheat imports, while financial constraints and better crops in Eastern Europe limited imports. Western European coarse grain imports for 1982/83 fell by almost one-seventh from last year because of larger crops and a slowdown in livestock industries. Coarse grain imports into Africa and Asia were about at last year's level, but those in Latin America rose substantially because of the crop shortfall in Mexico. Wheat trade in 1982/83 should be slightly lower than the previous year. Wheat imports declined in Europe because of a record crop, but they have increased substantially in India and Bangladesh. Rice trade in calendar 1983 is expected to be up from last year because Indonesian rice imports will increase substantially.

Table 4.--Cereal carryover stocks

	1969/70 1971/72	1980/81	1981/82	1982/83	1983/84
World					
-million tons	185.0	178.0	217.4	263.9	243.1
-as a percent of consumption	16.3	12.3	14.9	17.6	15.9
U.S.					
-million tons	67.5	62.1	104.4	152.6	115.9

Total grain supply--including production and carryover stocks--is at record levels, and global stocks comprise more than a 2-month supply, the largest since the end of the 1960's. In absolute amounts, stocks are the largest ever. World cereal exports may show little growth in 1983/84, and this factor--coupled with 1982/83 carryover stocks--could cause supplies in 1983/84 to be large again--even given lower coarse grain output--unless a significant global crop shortfall occurs. The composition of stocks across commodities tends to favor cereal use for feed rather than for food. Coarse grain stocks comprise the largest share, yet wheat and rice play the more important role in the diet of the developing countries. While global wheat stocks are large relative to consumption, they can be drawn down much more quickly than coarse grains. Rice stocks, on the other hand, are quite low. For 1982/83 they are expected to be only 6 percent of consumption--the lowest since 1974/75--compared with a 9-percent average during the previous 5 years.

Table 5.--Selected world cereal and oilseed prices

Commodity	Marketing year	1978/79 actual	1979/80	1980/81	1981/82	1982/83 forecast	1983/84 forecast
		Dollars per metric ton					
Wheat, #2 HRW, f.o.b. U.S. Gulf ports	June/May	138	173	184	171	158	160-190
Rice, broken, f.o.b. Bangkok Thailand	August/July	325	397	484	368	275	275-325
Corn, f.o.b. U.S. Gulf ports	October/ September	113	122	143	114	117	125-145
Soybean oil, Decatur	October/ September	601	531	495	417	375	350-440

World trade in 1982/83 has likely dropped to 201 million tons, 16 million below the preceeding year's record. Almost all of the decline is in coarse grain imports, most of that by the developed and centrally planned countries. Total cereal imports by the developing nations are estimated to have increased significantly this year, after being flat the previous year. Much of the increase is due to crop shortfalls in Mexico and India. Additional imports in other Asian countries (excluding Japan and the People's Republic of China) partially offset production losses. In the developing African nations, trade and production are not estimated to have increased, causing per capita consumption of grains to fall.

Root and Tuber Situation and Outlook

Roots and tubers such as cassava, sweet potatoes, and yams provide as much as half of total food intake in many of the tropical developing countries. These commodities are generally grown as subsistence crops, consumed locally, and seldom enter into national or international trade. Windfalls or shortfalls in production, however, often determine the food situation in the low-income countries and are a major factor in setting their food import requirements and aid needs.

By the end of the 1970's, annual output of the major roots and tubers had reached 180 million tons--the caloric equivalent of 58 million tons of cereals, or about 15 percent of the developing countries' total cereal production. Global root and tuber production in mid- and late 1982 and early 1983 was somewhat below the long-term trend. The small increase from 1981/82 was almost entirely due to potato output gains in East and South Asian countries. Cassava output was up only marginally. However, gains in several African countries--where cassava is predominately consumed as a food staple--about offset production declines in Asia, where output generally finds its way to the international cassava feed market. Thus,

while total per capita root and tuber production declined in 1982/83, per capita output used as food for the developing countries probably improved somewhat.

The outlook for the developing countries' root and tuber output is mixed. Production in 1983/84 is forecast to increase marginally, possibly 1 percent, because of stable planted area and an increasing yield trend. But these gains will not be sufficient to maintain 1982/83 per capita food use, even if concentrated in the countries whose output goes primarily to food use rather than to export markets. Per capita food energy supplies derived from roots and tubers are likely to decrease 1-2 percent, adding to the pressure on other food supplies such as cereals.

Table 6.--Root and tuber production in the developing countries 1/

Commodity	1969/70 1971/72 average	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84
	Million metric tons							
Latin America	47.1	44.2	44.6	44.0	42.3	45.0	44.5	44.7
Africa	64.9	76.0	76.2	78.8	81.0	82.6	84.3	85.8
Asia	37.6	50.4	55.1	52.7	55.9	54.7	54.2	54.5
Total	149.5	170.5	175.9	175.5	179.2	182.4	183.0	185.0
Wheat equivalent 2/	47.8	54.5	56.3	56.2	57.3	58.4	58.6	59.2
Per capita wheat equivalent	28.8	29.2	29.5	28.7	28.7	28.6	28.0	27.7

1/ Includes non-food aid developing countries not treated in this report.
2/ Assumes 1,000 cal./kg. for roots and tubers and 3,000 cal./kg. for wheat.

The root and tuber situations in the individual African, Asian, and Latin American regions differ somewhat because of the relative importance of the crops for food supplies as well as because of production differences. Roots play a particularly critical role in Africa, where they account for one-quarter to two-fifths of total food intake. African output in 1982/83 increased by 2 percent, but that lagged population growth of 2.5 percent, forcing per capita production levels to a decade low. Production in 1983/84 is expected to fare only slightly better, with any gain likely to be less than the 2-3 percent gain in population. This prognosis reflects not only pressure on the land used in root and tuber production but also the limited progress being made in raising yields.

In Asia, production of tubers is expected to increase somewhat in 1983/84, but this improvement would be achieved relative to the poorer levels reported in 1982/83. However, recent declines in Asian production do not necessarily signal decreased tuber availabilities for food. The bulk of the world's 5-6 million-ton trade in cassava feed originates in Asia, particularly Thailand. A substantial proportion of Asian production also moves into the local feed market rather than into food use. Hence, despite a fall in cassava production in 1982/83, the supplies available for local food use have been adequate.

Latin American production is likely to post marginal gains in 1983/84. In 1982/83, potato production in the region fell 1 percent from the exceptionally good crop the previous year. With population growing at 2 to 2.5 percent per year, the pressure on alternative food supplies will be serious, especially in the lowest income countries of the Caribbean Basin and Central America, as well as in several of the Andean countries.

Vegetable Oil Situation and Outlook

Edible vegetable oils are a basic food item in the diets of people living in many middle- and low-income nations. Vegetable oils provide essential fatty acids and can supply a substantial portion of daily caloric requirements. World vegetable oil output for 1982/83 is estimated to be record large, up 5 percent over the previous year. This large gain is mostly the result of a 6-percent rise in world oilseed production, which is estimated at nearly 180 million metric tons. Record soybean production in 1982/83 resulted primarily from the combination of large acreage increases and record yields in the United States. The estimate for South American soybean production is up also, since Brazil's crop gains should more than offset Argentina's decline. World sunflowerseed output for 1982/83 jumped substantially because of increased U.S. acreage and yields, recovery of the Soviet Union's crop, and large gains in Western Europe. Western Europe's production of sunflowerseed and rapeseed expanded because price incentives were higher for those than for other crops.

Despite this favorable world situation, the 1982/83 production estimates for the low-income countries are mixed. Most low-income countries cannot produce enough vegetable oils to meet their needs. India, a large producer of oilseeds, harvested a smaller peanut crop in 1982/83, down almost one-fourth from last year's record. Indian rapeseed production increase by 100,000 tons, however. Senegal and the Sudan are also prominent peanut-producing nations. Sudan's output may have declined slightly, while estimates indicate Senegal's crop to be 10 percent over 1981/82--a gain which would still put Senegal's current crop below the 1976/77-1980-81 average.

Among major categories of vegetable oils, output of tree-crop oils may have risen 2.5 percent in 1982/83, following the 10-percent gain in 1981/82 which caused a large buildup of stocks. A slower growth rate for palm oil output in Malaysia accounts for most of the slowdown in overall gains. Palm oil production in Indonesia and coconut oil production in the Philippines may be affected by dry weather this year, dampening prospects for 1983/84. Production of soybeans by the major producer, the United States, is expected to decline in 1983/84. But world vegetable oil output could increase because of U.S. production of high-oil-content seeds. Sunflowerseed is likely to expand in Europe and Argentina. Other countries, particularly Canada and India, may expand rapeseed output in 1983/84.

Table 7.--World supply and utilization of vegetable oils (edible) 1/

	1980/81	1981/82	1982/83 2/	1983/84 2/
	Million metric tons			
Beginning stocks	3.5	3.7	3.4	3.6
Production	38.0	40.5	42.8	45.0
Imports	11.0	11.7	12.3	12.9
Consumption	37.4	40.1	41.8	44.8
Exports	11.5	12.3	13.1	14.0
Ending stocks	3.7	3.4	3.6	3.8

1/ Includes soybean, sunflowerseed, cottonseed, peanut, rapeseed, coconut, and palm oils.
2/ ERS estimates.

Prices of vegetable oils fell throughout 1982/83, as they did the previous year. Soybean oil prices and refined palm oil prices have declined 12 and 15 percent, respectively, from 1981/82. Because of the continued strength of the U.S. dollar, however, prices of U.S. soybean oil for some developing countries may have declined very little or may even have risen during the year.

Demand for vegetable oils is highly price-and income-sensitive, so the large supplies of world vegetable oil and depressed world prices may increase demand by 2-3 percent for 1983/84. If the expected worldwide economic recovery materializes in 1983/84, global consumption could expand by 4 percent in 1984/85, outpacing production gains and precipitating a drawdown of high stocks.

Food Aid Availabilities and Outlook

Developed countries have responded in a variety of ways over the last decade to assist developing countries in importing needed goods and services. The flow of financial resources from OECD/DAC countries, 1/ both directly to developing countries and indirectly through multilateral agencies, increased from an annual average of $8.7 billion during 1971/73 to over $25 billion in 1981, in terms of net disbursements 2/. However, the share of these disbursements represented by food aid, whether through loans or grants, decreased during the same period from 15.0 percent to 11.6. Along with this overall decrease in food aid, a switch has developed in the means by which some donor countries give the food aid. OECD/DAC donors have increasingly channeled aid through multilateral agencies,

1/ Members of the Organization for Economic Cooperation and Development, Development Assistance Committee. These include Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Italy, Japan, Netherlands, New Zealand, Norway, Sweden, Switzerland, United Kingdom, and the United States.
2/ OECD, Development Assistance Committee. DAC Chairman's Report for 1982.

rather than by direct bilateral means, partly in response to global pressures for placing decisionmaking for financial assistance more under multinational management. Global hard times may have caused some donors to cut, rather than increase, assistance in real terms. Between 1980 and 1981, net official development disbursements from OECD/DAC countries, measured as a percentage of their gross national product, decreased approximately 1 percent.

Indications are that food aid budgets in both 1982/83 and 1983/84 are likely to continue near recent levels (table 8). Last year, rising unit costs due to higher commodity prices led to some shrinkage in volume of products provided by stagnating food aid budgets. In 1982/83, the supply and demand conditions outlined above should keep commodity prices relatively low (though they are likely to rise somewhat in 1983/84) and prevent still further shrinkage in volume.

Judging from high stock levels and good cereal crops this year, most donors--with the exception of Australia--should have plentiful supplies of relatively low-priced aid products over the next 10-14 months. However, only marginal increases in major donor countries' nominal aid funding will rule out any significant increase in aid volume this year or next.

The donor country aid forecasts shown in table 8 are based on past commodity composition patterns, estimated 1982/83 aid budgets, and 1983/84 budget forecasts. The data shown suggest that 9 million tons of cereals and 500,000 to 600,000 tons of other products will be donated over the next year.

UNITED STATES

For 1983/84, the Title I P.L. 480 budget request to Congress contains a request for a $13 million increase over the 1982/83 level, while Title II remains at the same level. The United States will meet, and possibly exceed, its cereals amount under the Food Aid Convention if prices hold at projected levels. Wheat and wheat products continue to be the major commodity shipped in the program. Because commodity prices are expected to be lower during the first part of the budgeting year, and then somewhat higher late in the year, the volume of food shipped may be similar to that in 1982/83 unless prices rise significantly.

EUROPEAN COMMUNITY

In accordance with its commitment under the 1980 Food Aid Convention, the European Community (EC) donated 1.65 million tons of cereal aid in 1982/83, three-fourths wheat and wheat flour. About 55 percent of the total commitment was expected to be funded by the Community and the remainder by individual member countries. The EC has also pledged 150,000 tons of skimmed milk powder and 45,000 tons of butteroil. The EC's share of total world aid in these two products is 75 and 100 percent, respectively.

The EC may pledge larger amounts of grain in future years. EC aid contributions are funded partly out of the Community's development aid fund and partly out of the budget for the Common Agricultural Policy (CAP). For the food aid that the EC

Table 8.--Volume of food aid contributions, principal commmodities

Commodity/country	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	Estimated allocations 2/ 1982/83 3/	Estimated allocations 2/ 1983/84 3/
				1,000 metric tons					
Grains	7,121	10,893	4/10,887	4/10,817	4/9,197	9,338	8,780	8,847	8,915
Argentina	0	15	32	30	38	67	20	47	45
Australia	261	230	252	329	315	370	485	450	450
Canada	1,034	1,176	884	735	730	600	600	764	675
European Community 1/	928	1,131	1,394	1,159	1,205	1,263	1,449	1,650	1,650
Finland	25	33	47	9	19	29	20	20	20
Japan	33	46	135	352	688	893	494	400	450
Norway	10	10	10	10	11	40	39	40	40
Sweden	47	122	104	104	98	94	119	80	100
Switzerland	36	33	32	32	32	16	22	43	35
United States	4,637	7,940	7,663	7,552	5,649	5,631	5,087	5,000	5,050
Other	199	157	354	505	412	324	445	353	400
Vegetable oils	320	239	419	237	256	327	NA	NA	NA
United States	217	176	366	157	230	265	267	NA	NA
Other	103	63	513	80	26	62	NA	NA	NA
Milk and products	172	204	249	251	301	334	NA	NA	NA
United States	26	55	67	64	58	85	75	NA	NA
Other	146	149	182	187	243	249	NA	NA	NA

NA = Not available.
1/ Aid from individual EC countries as well as from the entire commission of the European Community.
2/ Figures relate to allocations for the budgetary period of each country.
3/ Projection based on historical patterns and current food aid policies.
4/ In addition, according to unofficial reports, the USSR provided several Asian countries with 200,000 tons each in 1977/78 and 1979/80 and 400,000 tons each in 1978/79, as emergency aid.

Sources: Food and Agricultural Organization, U.S. A.I.D., and U.S. Department of Agriculture.

donates, the CAP budget finances the difference between the EC's high internal prices and lower world prices. To forestall the use of aid primarily as a means of surplus disposal, the EC's contributions are to be increasingly coordinated with overall development in targeted countries or regions.

JAPAN

In early 1982, Prime Minister Zenko Suzuki pledged to double Japan's overseas development assistance during 1981-85, as was done during 1976-80. Japan's assistance budget for fiscal 1983 (April 1983-March 1984) amounts to 976.8 billion yen ($4.1 billion), 2.8 percent above the fiscal 1982 level. The food aid component of the 1982 amount was approximately $100 million.

Japan's food aid contributions in 1982 consisted mainly of surplus rice, plus wheat and other products purchased from surplus countries for shipment to countries in need. Japanese rice was either granted outright or sold on concessional terms; the latter typically involved a 10-year grace period and 20 years to pay, with a 2-percent interest rate during the grace period and 3 percent thereafter. The price quoted on many of the sales ranged from $330 to $430 per ton, close to world prices. About 95 percent of Japan's subsidized rice exports went to African countries and Bangladesh. Leading African recipients were Tanzania, Madagascar, Sierra Leone, and Mozambique.

Japan's food aid commitment for fiscal 1983 and ensuing years should be relatively strong, even though surplus supplies of rice have been reduced as a result of a disposal program that is entering its fifth and last year. Japan should have about 400,000 tons available for export in fiscal 1983, as prescribed in the 1980 U.S.-Japan Rice Agreement which will expire March 31, 1984. Very little will be available in fiscal 1984 and thereafter.

More important to Japan's food aid outlook than domestic food availability is the nation's financial commitment to increase foreign aid. Japan has come under pressure to increase its share of the defense and foreign aid burden carried by developed countries. Constitutional and political constraints on expanding military expenditures beyond 1 percent of GNP make it highly likely that foreign aid (including food aid) will receive continuing favorable attention. Defense, energy measures, and economic aid to developing countries are the only elements of the current budget that were expanded within the context of an overall budget cut of 1.4 percent.

CANADA

Canada provides food aid to developing countries through three channels: (1) direct bilateral agreements with the recipient country; (2) multilateral agencies of the United Nations (primarily the World Food Program); and (3) Canadian nongovernmental organizations. In 1981/82 Canadian food aid disbursements through these three channels totaled C$236

million. The largest channel in 1981/82 was direct bilateral food aid, which totaled C$118.5 million. Canada supplies food aid mostly in the form of wheat and wheat flour, but also sends large quantities of milk powder, edible oils, and other staples.

AUSTRALIA

Australia's food aid donations in 1981/82 were above its commitment within the Food Aid Convention of the International Wheat Agreement to supply 0.4 million tons a year. However, the amount of wheat supplied during 1982/83 may be no more than 85,000 tons. The contribution can be waived or reduced in times of supply difficulties, and Australia's 1982/83 wheat supply is severely strained because widespread drought greatly reduced the 1982 harvest. Production declined 48 percent from a year earlier. Since domestic use for feeding has increased, export supplies have been substantially below last year. Minimum commercial shipments will be made to countries with long-term contracts and sales agreements.

FOOD AID NEEDS OF LOW-INCOME COUNTRIES

Financial Situation in the Low-Income Countries

The financial resources of low-income developing countries declined in 1982 and the early part of 1983 from already low levels in 1981. Consequently, the ability to commercially import food items also declined despite falling prices for food throughout 1982. A slow recovery in the industrialized countries appears to be underway, but the gains to the low-income developing countries will lag, perhaps by as much as a year, and the rate of increase in export earnings is apt to be slow by historical standards. The low-income countries will likely have slight ability to raise their commercial imports of food over the next 1 to 2 years, given the projection of slowly increasing export earnings, a general need to rebuild reserves, and high debt-servicing obligations.

The deterioration in financial conditions from 1981 to 1982 and early 1983 traced across all developing regions and for virtually every financial indicator. For low-income countries as a group, international currency reserves declined 16 percent in 1982 and were 30 percent lower than in 1980. Imports increased only 4 percent, down from 25-percent growth in 1979 and 8-percent growth in 1980. Debt-servicing payments increased 23 percent and the debt-service ratio climbed 5 points to 24 percent of merchandise exports. The trade deficit increased by one-third and is estimated to be more than twice the 1979 level. The sum of the trade deficit and the debt-service costs--a rough measure of a current account balance--increased by 28 percent and was also more than twice the 1979 level.

By most measures, then, these countries are financially worse off than in recent years. Populations, meanwhile, have continued growing, in many areas faster than the rate of agricultural production. In countries where food imports were increased to meet this higher demand, imports of other goods--including investment goods for development--were necessarily reduced because of low levels of foreign exchange.

Table 9.--Selected financial data for developing countries, 1982 estimates and forecasts for 1983 and 1984

Region and subregion	Yearend reserves			Imports			Exports			Debt service		
	1982	1983	1984	1982	1983	1984	1982	1983	1984	1982	1983	1984
	Million dollars											
North Africa	1,290	1,205	1,145	19,550	20,250	22,114	15,865	15,990	17,547	3,338	3,805	3,883
West Africa	743	720	735	6,970	7,453	7,888	5,614	6,023	6,521	1,231	1,336	1,364
Central Africa	217	235	255	2,035	2,184	2,340	2,597	2,732	3040	1,031	1,023	941
East Africa	703	630	620	6,821	7,231	7,654	3,252	3,304	3,449	1,314	1,487	1,455
Southern Africa	251	230	235	3,119	3,215	3,402	2,449	2,649	2,940	811	908	866
Middle East	2,369	2,250	2,250	6,322	6,692	7,295	3,497	3,745	4,140	140	209	237
Subtotal	5,573	5,270	5,240	44,817	47,025	50,693	33,274	34,443	37,637	7,865	8,768	8,746
South Asia	5,872	6,060	6,560	25,960	28,380	31,880	16,054	18,090	20,530	2,241	2,501	2,732
Southeast Asia	5,769	5,550	5,550	29,884	29,190	31,470	25,643	27,340	30,050	4,932	5,432	5,581
Subtotal	11,641	11,610	12,110	55,844	57,570	63,350	41,688	45,430	50,580	7,173	7,933	8,313
Caribbean	183	160	175	3,061	2,940	3,050	1,982	2,047	2,161	615	698	535
Central America	538	525	520	4,850	4,820	5,100	3,963	4,119	4,396	1,098	1,079	1,100
South America	5,675	5,750	5,870	11,400	11,250	11,980	9,218	9,893	10,912	3,735	3,825	3,894
Subtotal	6,396	6,435	6,565	19,311	19,010	20,130	15,163	16,059	17,469	5,449	5,602	5,529
Grand total	23,610	23,315	23,915	119,972	123,605	134,173	90,125	95,932	105,686	20,487	22,303	22,588

International reserves and exports declined at a slower rate in Africa and the Middle East--and the sum of the trade deficit and debt-service payments increased at a slower rate--than in Latin America or Asia. Nevertheless, reserves and earnings for the Africa and Middle East region declined in 1982, helped only by the relatively better conditions in the Middle Eastern countries and Cameroon, whose petroleum earnings boosted its trade surplus.

In Asia, international reserves and exports declined in 1982, while imports increased at the slowest rate in at least 3 years. South Asia fared better than most low-income subregions, with relatively strong growth in exports and imports and a smaller-than-average decline in international reserves. However, Southeast Asia--especially Indonesia and the Philippines--experienced a 25-percent decline in reserves and an estimated 12-percent drop in exports. This decline in exports, coupled with a 15-percent increase in imports, produced a $7-billion downward swing in the subregion's trade balance, from a $3-billion surplus in 1981 to a $4-billion deficit last year. However, Asia's exports are likely to increase faster through 1984 than those of the other regions, because its commodity prices will probably rise higher than most others as the world recovery proceeds.

In Latin America, both exports and imports declined in 1982. The Caribbean subregion exhibited the weakest performance of all Latin America subregions. Caribbean reserves fell to almost one-half their 1981 level; low commodity prices and export volumes caused export earnings to drop about 15 percent, and imports remained the same as in 1981. Foreign exchange shortages, largely caused by high debt-servicing obligations, cut Latin America's ability to import. Latin America's debt-service ratio was 36 percent in 1982, well above Asia's 17 percent, and projected high ratios will likely limit Latin America's import capabilities through 1984.

FOREIGN EXCHANGE EARNINGS

The deepening recession in the industrialized countries in 1982 wreaked havoc upon the foreign exchange earnings of the low-income countries. Last year marked a second straight year of declining exports for the low-income countries, the first such occurrence since 1950. Investment growth and credit flows are reported to have slowed in 1982 because of shifting investments and budgetary constraints in the industrialized countries. Worker remittances--a major source of foreign exchange for some countries, particularly the Yemens and Pakistan--slowed because of budgetary constraints in countries that hire foreign laborers, especially the petroleum-exporting countries.

The decline in low-income countries' export earnings in 1982 resulted from slowed volume growth and substantial price declines for most commodities. Commodities for which prices fell include cocoa, tea, rice, cotton, rubber, coconuts, copper, sugar, and bananas. Prices fell by more than 10 percent for most of these commodities. Of all major commodities exported by the low-income countries, only coffee and iron ore enjoyed rising prices in 1982. For all commodities taken together, prices in early 1983 averaged almost 20 percent below the 1980 levels.

Prospects for export earnings later in 1983 and in 1984 depend upon the outlook for recovery in the industrialized nations and for world commodity prices. Industrial production increased in the foreign industrialized economies beginning in December 1982. Demand for industrial raw materials--metals and agricultural raw materials that are used in the production of houses, automobiles, and other manufactured products--may pick up as the recovery progresses and inventories are consumed. Prices for some items have already begun to rise; copper, cotton, plywood, lumber, and tin prices all increased between November 1982 and March 1983. Prices for commodities that are not as sensitive to income changes in the industrialized countries, particularly beverages and foods, are not likely to increase as quickly.

Exports for the low-income regions as a group are expected to increase about 7 percent in 1983 and 10 percent in 1984, based on projections of commodity prices and volumes. These rates mark a turnaround from the negative growth rates experienced in 1980 and 1981, but they are still well below the averages of the late 1970's. Most of the export gains are likely to be from increasing prices rather than from rising volumes. The expected weakness of the recovery in the industrialized countries implies that growth in the volume of imports demanded by the low-income countries will be slow until 1984.

Asia is likely to show the greatest export gains--9 percent in 1983 and 10 percent in 1984--because its exports are primarily industrial goods. Cotton exports from Pakistan, rubber from Sri Lanka, and copper and wood from the Philippines are likely to contribute to the region's increase in exports. Export growth in Latin America for 1983 and 1984 is projected to be 6 percent and 9 percent, respectively. Export growth for the Caribbean and Central America subregions is likely to be somewhat slower. A higher percentage of foods and beverages is exported from these areas.

Africa may have the slowest export growth--5 percent and 8 percent in 1983 and 1984, respectively. Many African countries rely upon one or two commodities for virtually all export earnings. Burundi and Uganda depend upon coffee for 90 percent

of their earnings, groundnuts account for 63 percent of Gambia's exports, and cocoa comprises 60 percent of Ghana's export earnings. The exporters of metals and fibers will likely generate larger gains in earnings than will the exporters of beverages.

Foreign exchange from other sources--investment, aid, credits, and worker remittances--is likely to increase only slowly through 1984 for low-income countries. Investment growth will probably be slow as long as capacity utilization and final demand in the industrialized countries are low and interest rates adjusted for inflation remain high. Increases in development aid may also grow slowly while donor countries experience sustained concern over budget deficits. In 1982 the International Monetary Fund (IMF) and the General Agreement to Borrow (GAB) increased their lending capabilities, but only to alleviate balance-of-payments. Banking and trade credits are likely to be costly or inaccessible for most low-income countries. Workers' remittances will probably show little gain or even decline until petroleum prices and earnings accelerate.

IMPORT BILLS

The decline in export earnings and international reserves and difficulties in obtaining credit forced many developing countries to cut back on imports in 1982. Continuing foreign exchange constraints will probably keep import growth well below the double-digit rates of the 1970's. For the low-income countries as a group, import growth is expected to slow to 3 percent in 1983 before accelerating to 9 percent in 1984. However, growth will be much lower in real terms. Assuming a 5-percent rate of inflation in the industrialized countries in 1983 and 6 percent in 1984, import growth adjusted for inflation could be negative in 1983 and only 3 percent in 1984.

The prospects for imports by low-income Latin American countries are even worse than for all the low-income nations taken together. After declining 3 percent in 1982, Latin imports are projected to slide by 2 percent in 1983 and achieve positive growth only in 1984. Even then, the 6-percent growth expected will be in nominal terms and when adjusted for inflation will represent no change.

Lower petroleum prices will allow some countries to allocate foreign exchange to other imported goods. In the past, Bangladesh, India, Cape Verde, and Upper Volta have paid over two-thirds of their export earnings for imported oil, while many other countries have spent at least one-third. Real increases in petroleum prices are expected to be slight through 1984. However, currency depreciations against the dollar would result in greater price increases for imported petroleum, because petroleum is priced in dollars.

DEBT-SERVICE OBLIGATIONS

The 23-percent increase in debt-servicing payments in 1982 was a major financial constraint on the low-income countries' ability to import. Debt-service payments as a percentage of foreign exchange earning--the debt-service ratio--jumped to 24 percent from 19 percent in 1981, and is projected to remain at 24 percent over 1983 and 1984. Furthermore, the debt-service ratio could be even higher because the projections for debt-service payments are based only on the medium- and long-term debt contracted by December 1982, and do not include short-term debt or new debt incurred since then.

For some individual low-income countries, debt-service obligations have grown to severely large proportions. Debt-service payments will comprise in 1983 more than 50 percent of export earnings in Bolivia, Nicaragua, Peru, and Vietnam. In Africa, eight countries will also pay out over half of their earnings just to service existing obligations.

COMMERCIAL CAPACITY TO IMPORT FOOD

Several alternative methods are available to convert the general financial indicators treated above into precise measures of the low-income countries' commercial capacity to import food.

The calculation used in this study is based on estimates of each country's foreign exchange earnings, import bills, foreign exchange reserves, historical commercial food import patterns, and food import unit values. Estimates of a country's foreign exchange earnings were made on the basis of export trade forecasts and, in selected cases where pertinent, other sources of earnings such as worker remittances and tourism. This foreign exchange earnings estimate was added to estimates of a country's foreign exchange reserves to arrive at total foreign exchange supplies. This total was then adjusted downward using historical and estimated import bills to maintain the country's historical reserves-to-imports ratio.

This adjusted foreign exchange availability estimate was reduced further by the country's debt-service obligations to arrive at a net foreign exchange availability. The proportion of this net foreign exchange a vailability allocated to commercial food imports in the base period was held constant and used to calculate the foreign exchange available in the forecast period for commercial food imports. The volume of imports that could be purchased with this final estimate of net foreign exchange availability is estimated using forecast food import unit values.

Measures of Food Aid Needs

CONCEPTUAL FRAMEWORK

The financial indicators noted above and the food data described below are used to generate two alternative measures of food aid needs. Each measure highlights a different aspect of the food problem in the low-income countries and a different notion of the role aid should play in easing the problem. (For a more detailed discussion, see section entitled "Methodological Notes.")

The first measure, termed "status-quo," provides an estimate of food aid needed to maintain per capita intake of food staples at the levels reported over the last 4 years. This measure is based on the notion that food aid can be allocated at least to maintain current consumption levels. No provision is made either for improving substandard diets or for correcting problems related to the uneven distribution of food across or within countries. The status quo measure might be viewed as a minimum level of need.

The second measure, termed "nutrition-based," provides an estimate of the food aid required to raise per capita intake of staples to the levels associated with FAO's recommended minimums. This measure is based on the notion that food aid can be allocated to fill the most severe nutritional gaps rather than to maintain a recent, possibly substandard, status quo. In this sense, the nutrition-based measure can be viewed as a maximum level of food aid need.

While the status quo- and nutrition-based methods differ in the calculation of requirement norms, they have a common structure. In each, an estimate of every country's domestic supplies of food staples is subtracted from an estimate of staple food requirements to arrive at a quantity estimate of import requirements. Import requirements are then totaled for food groups, based on assumptions regarding their substitutability. An estimate of a country's capacity to import food commercially is then subtracted from the import requirement to arrive at an estimate of food aid needs. Import unit values for each food group are used to convert import requirements, import capacity, and aid needs from quantity to value terms.

Several factors affecting aid needs in a country are not addressed in these estimates. First, food distribution problems--both geographical and across income or population groups--are overlooked by using average country food availabilities. This can mask acute shortages in specific places within a country as well as uneven distribution of food across localities. However, measuring the unevenness of food distribution is extremely difficult, because data are not available.

Second, food aid needs are calculated without regard to how importing the full amount of estimated aid might affect a country. In some cases, importing the full amount could disrupt the local economy; put untoward burdens on food handling, storage, and distribution channels; or discourage food producers. Finally, aid needs are estimated regardless of a country's food and agriculture policies and performance. Though these issues figure importantly in allocating food aid funds, a comprehensive consideration of them is beyond the scope of this report.

INTRODUCTION TO COUNTRY NARRATIVES AND TABLES

The following section reports on the food and financial situation and outlook for 67 countries. The materials focus on summarizing events during the 1982/83 local marketing year (generally July-June) and on projecting food and financial conditions for 1983/84 and 1984/85.

The data shown in the tables must be interpreted with caution. Forecasts of food production, population, and financial conditions for 1983/84 and 1984/85 represent ERS's forecasts of what is likely to happen during those years. But, 1983/84 and 1984/85 estimates of all other items--stocks, use, import requirements, and aid needs--are not forecasts of what is likely to happen; they are normative targets derived using the status quo and nutrition assumptions explained in detail in the final "Methodological Notes" section of the report. Aid need calculations are also subject to a number of adjustments detailed in the Methodology section.

Tables Entitled "Basic Food Data"

These tables provide food staple supply and utilization data for the base period (1979/80-1982/83 average and 1982/83) and for forecast years (1983/84 and 1984/85). Because the tables are long and complex, an explanation of each column heading follows here:

1. Actual or forecast production--actual production for the individual staples for the 1979/80-1982/83 base period and forecast production for 1983/84 and 1984/85.

2. Actual or targeted beginning and ending stocks--actual stocks for 1979/80-1982/83 and targeted stocks for 1983/84 and 1984/85. Targeted stocks are calculated so as to maintain ending stocks for 1982/83 constant throughout the forecasting period. The same targeted stock levels are used in the status quo- and nutrition-based estimation of aid needs.

3. Net imports--actual net imports during 1979/80-1982/83. Net import figures for forecast years are not supplied. Instead, targeted import requirements are estimated in the next set of tables.

4. Total nonfeed use--actual human consumption during the 1979/80-1982/83 base period.

5. Feed use--actual feed use during 1979/80-1982/83 and targeted feed use for 1983/84 and 1984/85. Targeted feed use is calculated to maintain per capita feed use at base-period levels. The same level of feed use is employed in the status quo- and nutrition-based estimates of aid needs.

6. Total use--actual total feed and nonfeed consumption during 1979/80-1982/83.

7. Actual or forecast population--actual population in 1982/83 and forecast population for 1983/84 and 1984/85. Data generally include adjustments for refugee movements.

8. Per capita nonfeed use--actual per capita human consumption for 1979/80-1982/83.

9. Commodities covered and share of daily per capita caloric intake--the food staples included for each country, each staple's share of total daily caloric intake, and the share of total daily caloric intake covered by the food staples analyzed. Data are drawn from the 1975-77 FAO Food Balance Sheets with adjustments made in some cases for differences in feed use or changes in a staple's share of the diet.

Tables Entitled "Total Food Requirements, Import Requirements, and Aid Needs to Support Consumption: Status Quo- and Nutrition-Based Estimates"

These tables deal only with 1983/84 and 1984/85 data. An explanation of each column heading follows:

1. Forecast domestic production data are drawn from the "basic food data " tables.

2. Total use, status quo--total amount of a staple needed to maintain per capita human consumption at the 1979/80-1982/83 level and feed use at the targeted level.

3. Total use, nutrition-based--the amount of a staple needed to support recommended minimum daily per capita caloric intake levels and targeted feed use.

4. Import requirements, quantity, status quo--the imports of a staple required to maintain base period consumption, and also to achieve the targeted levels of stocks and feed use shown in the basic food data table. These estimates are calculated for each staple by subtracting forecast domestic production from status quo-based total use.

Subtotals for each commodity group are calculated by summing the import requirements for individual commodities. Calculated surpluses (negative import requirements) for individual commodities within groups are subtracted from deficits in other commodities because foods are assumed to be substitutable within groups. Noncereals such as roots and tubers are converted to caloric wheat equivalents before being summed. Negative subtotals are shown as zeros because these calculated surpluses are assumed not to be substitutable elsewhere in the diet.

5. Import requirements, quantity, nutrition-based--the imports of a staple required to support recommended minimum per capita caloric intake and the targeted stock and feed use levels shown in the basic food data table. These estimates are calculated by subtracting forecast domestic production from nutrition-based total use. Totals for each commodity group by year are computed in the way described in (4) above.

6. Import requirements, value--the estimated dollar value (c.i.f.) of the status quo- and nutrition-based import requirements by commodity group. Values are calculated for each commodity group by multiplying import quantity by a common estimate of unit import cost.

7. Commercial import capacity--an estimate of the amount of food within each group that a country can afford to import commercially without drawing its foreign exchange reserves below historical levels. Countries are required in forecast years to spend the same proportion of foreign exchange on commercial food imports as in the base period. The measure is sensitive to historical and projected levels of exchange holdings, total merchandise imports and exports, and debt service. The measure is provided in both quantity and value, using the same estimate of unit import cost as in the import requirements estimate.

8. Food aid needs, quantity--the estimated quantity of food aid needed in each commodity group to support either the status quo- or nutrition-based use level and targeted stock and feed use levels.

9. Food aid needs, value--the estimated value of the food aid needed in each commodity group to maintain either status quo consumption or nutrition-based consumption and targeted stock and feed use levels.

Country total food aid needs in dollars can be calculated either by summing across commodity groups or by subtracting a country's total dollar commercial import capacity from the total dollar import requirements. In this way, a surplus (negative food aid needs) in one commodity group is applied toward deficits in other commodity groups, because the negative aid needs result from foreign exchange availabilities. Because these countries are not expected to become food aid donors, any negative food aid need total is shown as zero.

Tables Entitled "Financial Indicators, Actual and Projected"

These tables give historical data and forecasts for four key financial indicators: yearend international reserves, merchandise exports, merchandise imports, and debt-service obligations. All data are on a calendar year basis and are compiled from a variety of sources, including the World Bank, the International Monetary Fund, country sources, and ERS estimates.

Tables Entitled "Summary of Cereal Import Requirements and Food Aid Needs"	These tables provide a summary of volume data on actual cereal imports for 1982/83 and targeted cereal import requirements and aid needs for 1983/84. The data are taken directly from the preceding tables. These summary tables provide cereal data only.
Tables Entitled "Import Requirements and Aid Needs to Support Cereal Stock Adjustments"	These tables provide calculations of cereal import requirements and aid needs resulting from not only consumption requirements but also cereal stock adjustments. The estimated stock increment (quantity and value) is added to import requirements and aid needs to support consumption--listed in earlier tables--to arrive at import requirements and aid needs to support both consumption and stock adjustments. For a discussion of how stock increment estimates are calculated, see "Methodological Notes."

Africa and the Middle East

NORTH AFRICA SUBREGION

Grain production in North Africa increased by almost 30 percent in 1982/83, led by Morocco, where production recovered from the record low caused by the 1981 drought. Total cereal output for the three countries reached an alltime high 13.7 million tons. Increased use of fertilizer, herbicides, and machinery helped achieve higher yields for wheat, the main cereal in all three countries. Grain imports are expected to total 10.2 million tons in 1983/84, nearly equal to imports during 1982/83. Egypt is expected to account for almost all of the increase through larger imports of wheat and flour from the United States, assisted by the PIK flour subsidy and a $173-million export credit through the GSM-102 and blended credit programs.

Egypt

Egypt's agricultural production increased about 2 percent overall in 1982/83, registering gains in both cereals and livestock products. Grain production--chiefly wheat, rice, and corn--increased 4 percent to a record 7.7 million tons. Cereal output gains were due in part to the Cereals Improvement Project, which provided free inputs for selected producers. The area planted in cereals declined slightly in 1982/83 to about 1.95 million hectares, but may recover to 2 million hectares next year because of larger wheat sowings on reclaimed desert land. Per capita output of cereals rebounded in the last 2 years as annual population growth stabilized at about 3 percent. No reductions are expected in this rate in the near term, as improved health services and a better diet in rural areas have reduced the infant mortality rate.

Declines in imports from major suppliers sent Egypt's total agricultural imports down about 10 percent from the preceding year to approximately $3.6 billion for 1982/83. The United States and the EC each provided 22 percent of Egypt's total agricultural imports in 1982, while imports from Australia, Turkey, and Brazil grew rapidly. Egypt's imports of grain declined in late 1982 but rebounded in early 1983, leaving total imports of all cereals in 1982/83 at an estimated 7.2 million tons--down about 6 percent from 1981/82. U.S. shipments of 820,000 tons of wheat and 375,000 tons of wheat flour under Title I, P.L. 480, provided a significant share of this total. Additional imports of wheat flour through the PIK flour subsidy and GSM-102 program and 400,000 tons of wheat through blended credit reflect Egypt's increased use of assistance programs other than P.L. 480. These shipments should bring the U.S. share of Egypt's wheat and wheat flour imports to about half of the total, or 3 million tons.

The average Egyptian diet contains about 3,000 calories--well above the FAO recommended minimum--and 80 grams of protein per day. Balady bread accounts for about half of the food intake. Animal products, in contrast, account for only 7 percent. During the last 3 years, Egyptians depended upon imports for over half of their food supply. Efforts to curtail imports in 1982/83 met with some success, as evidenced by the drop in cereal imports mentioned earlier. But the availability of subsidized bread in rural areas generates growing demand for imports of wheat and flour.

Egypt's foreign exchange outlook for 1983 has been dampened by lower prices for petroleum, poor prospects for expanding cotton exports, and problems in maintaining worker remittances from other countries. Egypt's total imports may rise in 1983 to over $12 billion, leaving a current account deficit forecast at $4.9 billion, the highest of any country covered in this study. Increased flows of investment funds from wealthy Arab countries and payment from Iraq for Egypt's military and economic assistance could help in servicing Egypt's foreign debt of $17 billion.

Morocco

Moroccan grain production in 1982/83 reached an estimated 4.8 million tons, more than double 1981/82's drought-affected 2 million tons--a remarkable recovery in view of the erratic weather during the growing season. The rains were late enough that most of the planting had to be done in December and January, well past the optimum time. In the spring, moreover, sporadic dry spells stressed the plants. The output recovery was helped by a special equipment-sharing program organized at planting, through which 24,000 tractors were made available to 41,000 farmers, enabling them to achieve rapid preparation of 1.6 million hectares.

The 1983/84 production season has started well, with timely plowing and seeding, as well as continued ample supplies of machinery at the disposal of small farmers. Seed and fertilizer distribution also functioned better than in recent years. Dry weather in March again threatened the crops, but subsequent rains have augured well for a normal crop.

Total grain use was estimated up in 1982/83 due to a 3-percent gain in population and higher feed use of corn and barley. On average, food supplies are adequate in Morocco. Caloric intake of grains is higher than the FAO minimum. However, many of the 1.5 million farm-working population who either have no land or who farm less than 5 hectares consume much less grain than the FAO minimum. Wheat import needs--which constitute all of Morocco's grain import requirements--are estimated at 1.8 million tons for 1983/84, or about the same as in 1982/83.

Assuming petroleum prices remain stable in 1983, the mounting trade deficit may be kept under $2 billion; 25 percent of Morocco's exports are devoted to oil purchases. Ironically, though, stable oil prices may also work to Morocco's disadvantage. Lower world oil prices that reduce Morocco's import costs also lead to declining oil revenues for Arab oil producers, and possible reductions in concessional financing from these producers for their Arab neighbor Morocco. Projected world demand for phosphate products should boost Morocco's ability to pay for some import needs beyond 1984. However, for the near term the situation is not likely to improve without a significant recovery of phosphate prices. Considering all African countries, Morocco's trade deficit in 1983 will be second only to Egypt's in magnitude. Currency reserves are projected to be nearly depleted by the end of 1983,

providing only 1 week of import coverage. With an external debt of $10 billion and debt-service payments nearing $1.5 billion in 1983--nearly 80 percent of projected export earnings--Morocco will be hard pressed to pay for more than one-quarter of its cereal import requirements.

Tunisia

The 1982/83 grain harvest, estimated at a record 1.26 million tons, was achieved on the smallest planted area since 1968. Yields for durum and soft wheat were at 25-year records, even with less-than-ideal weather. New technology, including better weed control and faster land preparation and planting, helped to counter the effects of the unfavorable weather. Moreover, the outlook for next year's crop is even more promising. Wheat and barley seeding was favored by heavy rains, and there is a 3-percent increase in seeded area. Drought in January and February of 1983 threatened the crop, but rains in March restored confidence in prospects for another record cereal harvest.

Current food consumption is estimated to be at least 2,484 calories per day in Tunisia--well above the minimum recommended by the FAO. Tunisia's grain imports play an important part in this ample diet, and as a result of population increases and cereal feed requirements, cereal import needs are expected to increase in 1983/84 to 1.0 million tons. Most of the increase needed is likely to be for corn to use as feed in the poultry industry.

Receipts from tourism, transfers from Tunisians working abroad, and capital inflows will continue to finance the trade deficit, forecast at $950 million for 1983/84. External debt currently totals almost $3 billion, or about one-third of GDP. But stable reserve levels and expected growth in export earnings from petroleum and phosphate rock should enable Tunisia to purchase its needed cereal imports commercially.

Table 10.--North Africa basic food data

Country/commodity	Actual or forecast production	Actual or targeted beginning stocks	Net imports	Use: Nonfeed use	Use: Feed use	Use: Total use	Actual or targeted ending stocks	Actual or forecast population	Per capita nonfeed use	Commodities covered and share of daily per capita caloric intake: Commodity	Percent
	1,000 tons							Thousands	Kilos		
Egypt											
Major cereals										Wheat	33.1
1979/80-1982/83	7,424	2,614	6,720	12,285	2,223	14,508	2,290	42,854	287	Rice	11.5
1982/83 prel.	7,665	2,006	7,199	12,496	2,603	15,099	1,771	44,794	279	Corn	18.3
1983/84 est.	7,870	1,771	--	--	2,379	--	1,771	46,040	--	Sorghum	1.9
1984/85 est.	8,195	1,771	--	--	2,444	--	1,771	47,300	--	Barley	.1
										Total	64.9
Morocco											
Wheat										Wheat	41.9
1979/80-1982/83	1,671	452	1,956	3,534	92	3,626	452	20,914	169	Corn	3.0
1982/83 prel.	2,183	500	1,859	4,042	100	4,142	400	22,230	182	Barley	21.4
1983/84 est.	2,200	400	--	--	101	--	400	22,835	--	Total	66.2
1984/85 est.	2,225	400	--	--	103	--	400	23,456	--		
Other cereals											
1979/80-1982/83	2,113	180	291	1,567	881	2,449	135	20,914	75		
1982/83 prel.	2,581	90	360	1,966	975	2,941	90	22,230	88		
1983/84 est.	2,950	90	--	--	960	--	90	22,835	--		
1984/85 est.	3,000	90	--	--	987	--	90	23,456	--		
Tunisia											
Major cereals										Wheat	51.6
1979/80-1982/83	1,151	244	993	1,484	655	2,139	249	6,569	226	Corn	.1
1982/83 prel.	1,255	250	940	1,527	668	2,195	250	6,837	223	Barley	1.4
1983/84 est.	1,330	250	--	--	700	--	250	7,028	--	Total	53.1
1984/85 est.	1,320	250	--	--	714	--	250	7,169	--		
North Africa, total											
Major cereals											
1979/80-1982/83	12,358	3,490	9,959	18,870	3,851	22,722	3,125	--	--		
1982/83 prel.	13,684	2,846	10,358	20,031	4,346	24,377	2,511	--	--		
1983/84 est.	14,350	2,511	--	--	4,140	--	2,511	--	--		
1984/85 est.	14,740	2,511	--	--	4,248	--	2,511	--	--		

-- Not applicable.

Table 11.--North Africa food requirements, import requirements, and food aid needs to support consumption, status quo- and nutrition-based estimates

Country/ commodity	Forecast domestic production	Total use 1/		Import requirements				Commercial import capacity		Food aid needs			
				Quantity		Value				Quantity		Value	
		Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based			Status quo	Nutrit. based	Status quo	Nutrit. based
	---1,000 tons---					Million dollars		1,000 tons	Million dollars	1,000 tons		Million dollars	
Egypt													
Major cereals													
1983/84	7,870	15,584	11,889	7,714	4,019	1,388	723	4,398	791	3317	0	597	0
1984/85	8,195	16,011	12,235	7,816	4,040	1,467	758	4,273	802	3543	0	665	0
Morocco													
Wheat													
1983/84	2,200	3,956	3,502	1,756	1,302	--	--	--	--	--	--	--	--
1984/85	2,225	4,064	3,591	1,839	1,366	--	--	--	--	--	--	--	--
Other cereals													
1983/84	2,950	2,675	3,306	-275	356	--	--	--	--	--	--	--	--
1984/85	3,000	2,747	3,387	-253	387	--	--	--	--	--	--	--	--
Total													
1983/84	--	--	--	1,481	1,658	258	289	1,281	223	200	377	35	66
1984/85	--	--	--	1,586	1,752	289	319	1,638	298	0	114	0	21
Tunisia													
Major cereals													
1983/84	1,330	2,287	2,053	957	723	182	138	961	183	0	0	0	0
1984/85	1,320	2,333	2,088	1,013	768	201	153	1,127	224	0	0	0	0
North Africa, total													
Total cereals													
1983/84	--	--	--	10,153	6,400	1,828	1,150	--	--	3517	377	632	66
1984/85	--	--	--	10,416	6,560	1,956	1,229	--	--	3543	114	665	21
Total													
1983/84	--	--	--	--	--	1,828	1,150	--	--	--	--	632	66
1984/85	--	--	--	--	--	1,956	1,229	--	--	--	--	665	21

1/ The sum of targeted nonfeed and feed use.
-- Not applicable.

Table 12.--Summary of North Africa cereal import requirements and food aid needs to support consumption, status quo and nutrition-based estimates

Country	1982/83 imports	1983/84 import requirements: Status quo	1983/84 import requirements: Nutrit. based	1983/84 aid needs: Status quo	1983/84 aid needs: Nutrit. based
	----------	1,000 tons	----------		
Egypt	7,199	7,714	4,019	3,317	0
Morocco	2,219	1,481	1,658	200	377
Tunisia	940	957	723	0	0
North Africa, total	10,358	10,153	6,400	3,517	377

Table 13.--North Africa financial indicators, actual and projected

Country and year	International reserves yearend	Exports (f.o.b.)	Imports (f.o.b.)	Debt service due	1983 and 1984 conditions as of April 1983
	Million dollars				
Egypt					
1979-82	722	8,569	10,261	1,198	Exports declined in 1982 but receipts from nonmerchandise trade increased slightly. Petroleum exports are likely to increase, because of long-term agreements, even though prices are low. Export growth is apt to be slow, however, because of weak world demand for Egypt's products. Remittances from workers will help finance the current account deficits.
1982 prel.	595	9,150	11,800	1,438	
1983 est.	550	9,340	12,350	1,770	
1984 est.	500	9,550	13,300	1,766	
Morocco					
1979-82	320	3,926	3,614	1,152	Export receipts continued to decline in 1982 because shipments and prices of phosphate products fell. Exports could decline again in 1983. Imports fell despite large grain purchases. IMF loan of $1 billion will help service BOP shortfalls.
1982 prel.	95	3,755	3,600	1,385	
1983 est.	80	3,400	3,700	1,482	
1984 est.	70	4,100	4,150	1,575	
Tunisia					
1979-82	576	2,935	3,817	443	Rising imports in 1982 pushed the trade deficit above the recent average. Receipts from tourism, workers' remittances, and capital inflows financed much of the deficit. Imports may be constrained by foreign exchange shortages.
1982 prel.	600	2,960	4,150	515	
1983 est.	575	3,250	4,200	553	
1984 est.	575	3,897	4,664	542	
North Africa, total					
1979-82	1,618	15,431	17,692	2,792	
1982 prel.	1,290	15,865	19,550	3,338	
1983 est.	1,205	15,990	20,250	3,805	
1984 est.	1,145	17,547	22,114	3,883	

Table 14.--North Africa import requirements and aid needs to support cereal stock adjustments 1/

Country	Estimated stock increment		Import requirements				Aid needs			
			Quantity		Value		Quantity		Value	
	Quantity	Value	Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based
	1,000 tons	Million dollars	1,000 tons		Million dollars		1,000 tons		Million dollars	
Egypt										
Cereals										
1983/84	448	81	8,162	4,467	1,469	804	3765	69	677	12
1984/85	299	56	8,115	4,338	1,523	814	3841	65	721	12
Total										
1983/84	--	81	--	--	1,469	804	--	--	677	12
1984/85	--	56	--	--	1,523	814	--	--	721	12
Morocco										
Cereals										
1983/84	92	16	1,573	1,750	274	305	292	469	51	82
1984/85	104	19	1,690	1,856	307	338	52	218	9	40
Total										
1983/84	--	16	--	--	274	305	--	--	51	82
1984/85	--	19	--	--	307	338	--	--	9	40
Tunisia										
Cereals										
1983/84	31	6	988	754	188	144	28	0	5	0
1984/85	20	4	1,033	788	205	157	0	0	0	0
Total										
1983/84	--	6	--	--	188	144	--	--	5	0
1984/85	--	4	--	--	205	157	--	--	0	0
North Africa, total										
Cereals										
1983/84	571	103	10,724	6,971	1,931	1,252	4,084	332	734	55
1984/85	422	79	10,838	6,983	2,035	1,308	3,800	0	712	0
Total										
1983/84	--	103	--	--	1,931	1,252	--	--	734	55
1984/85	--	79	--	--	2,035	1,308	--	--	712	0

1/ Includes only countries for which cereal stock data are available.
-- Not applicable.

WEST AFRICA SUBREGION

Favorable weather across coastal West African countries led to slight increases in cereal production in 1982/83 for most of the region, excluding Gambia and Ghana. However, cereal imports also continued to increase as population growth outstripped production gains and consumer demand rose for imported cereals such as wheat. In 1982/83, production declines occurred in Ghana, Chad, Mali, Niger, Senegal, and Mauritania. Most of the Sahelian countries have requested emergency food assistance to help meet deficits caused by poor weather and pest damage.

Cereal import requirements in West Africa during 1983/84 are projected to climb to over 2 million tons, even with normal harvests and no increases in per capita intake. Per capita consumption in many countries still remains well below the FAO minimum. For example, cereal imports in Upper Volta would need to increase eightfold and those in Chad nearly fivefold to meet nutritional requirements.

The capacity to import food on commercial terms is limited for most of the countries in this region, because declining world prices for agricultural and mineral exports--the primary source of the region's foreign exchange--have reduced export revenues. Several of the countries, including Senegal, Mali, Gambia, Niger, and Ghana, have introduced major financial and policy reforms in an effort to revive their weakened economies. The IMF has initiated many of these structural changes, in conjunction with standby agreements to bridge balance-of-payment difficulties. Currency reserves are particularly troublesome for West African countries. Of the 10 low-income countries in the world that are forecast to have less than 2 weeks' supply of import coverage in 1983, 7 are in West Africa.

In the near term, regional dependence on food aid to maintain current consumption is increasing. Of cereal import requirements for the Sahel and coastal West Africa, nearly half--over 900,000 tons--must be concessionally financed or foregone in 1983/84. For Chad, Mali, and Liberia, food aid will have to provide between 89 and 94 percent of 1983/84 import requirements just to continue status quo consumption levels. Only Cameroon is able to purchase most of its food import requirements commercially, because of the rapid and successful development of its petroleum industry.

Benin

Benin produces most of its staple foods, including corn, cassava, and yams. Normal rainfall in 1982/83 increased production of most items, once again ensuring adequate supplies. But wheat and rice--Benin's major cereal imports--were purchased in larger quantities again in 1982/83. Higher imports were precipitated in part by the expulsion of nearly 1 million aliens from Nigeria in early 1983, because they passed through Benin to Ghana and other destinations,

straining Benin's domestic food supplies. The problem was ameliorated in part by emergency food aid supplied by international donors. Most of the aliens have now returned to their countries of origin.

Benin's capacity to import food commercially is quite limited. Export earnings may cover only half of the country's total imports in 1983. And yearend reserves are forecast to provide an alarmingly low 2 days of import coverage. Benin's food aid needs for 1983/84 are estimated at 46,000 tons of grain, out of a total of 86,000 tons needed to maintain grain consumption at historical levels.

Cameroon

Favorable weather improved Cameroon's agricultural production in 1982/83. Corn output is estimated to have increased to 470,000 tons, and millet to 400,000 tons. Rice production remained at about 30,000 tons. Production of starchy tubers also increased; they are a major component of the Cameroonian diet. Cameroon's import requirements are expected to remain about the same in 1983/84, at 213,000 tons--mostly wheat and rice--to meet the demand in urban areas.

Cameroon will be able to purchase most of its food imports commercially in 1983/84. Since 1980, economic growth has been spurred by sizable petroleum exports, which are projected to increase through 1985. Cameroon is the only country in the region besides Liberia that is expected to show a current account surplus in 1983. Ample foreign exchange has facilitated rapid increases in imports of cereals, meats, and processed foods, while external debt remains low.

Cape Verde

Cape Verde's perpetual battle with drought continued in 1982/83. Corn and beans, the country's staple crops, were sown under unfavorably dry conditions in July. No substantial rain fell until late August, when Tropical Storm Beryl dumped torrents, causing extensive flood damage. Corn and bean production is estimated at 4,000 and 3,000 tons, respectively. Though increased crop production is unlikely in 1983/84, a slight decline in the islands' population may hold food import requirements to slightly under the estimate for last year.

Cape Verde has an agriculture-based economy with few sources of foreign exchange earnings. Foreign debt levels are particularly burdensome. Though not large in absolute terms, Cape Verde's 1983 debt-service obligations are forecast to exceed export earnings by an astounding 14.8 times. Foreign aid helped provide over 40 percent of the country's food imports during 1975-81, with food imports accounting for 80 percent of total consumption. Because of Cape Verde's chronic dependence on food aid, the Government has asked donors to restructure their assistance programs to embrace multiyear commitments rather than emergency allocations.

Chad

Chad's food production has been devastated by recurrent drought and the recent civil war. Insufficient rains during the 1982/83 growing season wiped out production in central Chad. Crop area in the south, the nation's primary agricultural region, declined because of war damage. The Government estimates that up to 90 percent of the country's livestock has been lost because of disease and poor pasturing conditions.

Poor production has resulted in severe food shortages throughout the country, as well as localized starvation. Although donors pledged sufficient food aid to meet FAO's 1983 appeal for 55,000 tons of cereals, logistical constraints such as poor road conditions and truck shortages have hampered efforts to alleviate malnutrition and prevent starvation.

Furthermore, Chad is ill-equipped to finance food purchases. At $120, Chad's per capita GNP is one of the lowest in the world. At the end of 1982, its currency reserves were estimated to be depleted. In 1983/84, Chad will need 75,000 tons of cereal aid needs just to maintain current low caloric intake for the population. An additional 315,000 tons of food aid would have to be imported to bring per capita intake up to the FAO minimum.

Gambia

Favorable weather during the 1982/83 growing season resulted in Gambia's second consecutive year of good harvests. Production of staples--rice, millet, and sorghum--is estimated to have about equaled 1981/82 levels. Peanut production was up 25 percent to 150,000 tons. Peanuts are an important food as well as a major export crop and generally account for 50 to 80 percent of Gambia's export earnings.

Assuming continued favorable harvests, Gambia's status quo import requirements are projected to increase very modestly in 1983/84 to 49,000 tons of cereals, comprised mostly of rice. Surplus peanut production for export masks the country's increasing dependence on cereal imports.

As a result of increased peanut production and extensive policy reforms undertaken as part of an IMF standby arrangement, Gambia's economy made a strong recovery in 1982, with real GDP increasing by 11.2 percent. Continuation of these policies is expected to generate strong economic growth, improving Gambia's troubled balance-of-payments position.

Ghana

Agricultural output fell in 1982/83 from the previous year because of erratic rainfall and a severely depressed economy. Per capita agricultural production continued its decade-long decline. In the general economy, real GDP has fallen for several years, and inflation averaged 34.8 percent during 1970-80. Most industries have been operating at a fraction of their capacity because of a shortage of raw materials and spare parts. Battling inflation and low supplies of consumer goods, the Government attempted to enforce unrealistically low prices for many food items. This discouraged farmers from producing for the market, constraining supplies even more.

Ghana's already tight food supply was further strained by the sudden return of up to a million Ghanaians during January and February of 1983 after the Government of Nigeria expelled illegal aliens. Many donors quickly responded to Ghana's request for emergency food aid for the returnees, and the crisis was temporarily resolved. The Government was able to relocate most in regions where they had previously resided. Officials hope that they will take up farming to relieve the country's intensified food shortages, but lack of incentives for food production makes this unlikely in the short run.

A decline in the quantity and value of cocoa exports in 1982 led to a deterioration in Ghana's financial situation. Earnings from cocoa fell below $350 million, compared with over $400 million in 1981 and $800 million in 1980. Ghana's estimated 1982 trade deficit of $60 million compared unfavorably with small surpluses previous to 1981. Furthermore, the trade deficit is projected to more than double in 1983, in part because this year's unusually dry weather is expected to lower 1983 cocoa production. Ghana's economic position may improve if an IMF stabilization program--which includes major economic policy reform--is successfully negotiated and implemented.

Grain-equivalent imports needed to maintain historical levels of consumption in 1983/84 are forecast at almost 250,000 tons, higher than the 200,000 imported in 1982/83. Concessional assistance will be needed for over two-thirds of the amount. In order to bring consumption up to the FAO minimum, cereal imports would need to be almost 540,000 tons.

Guinea

Guinea's production of main food crops--rice, corn, and cassava--increased over 3 percent in 1982/83 from the previous year, enough to keep ahead of the estimated 2.8-percent increase in population and to reduce somewhat Guinea's traditional dependence on cereal imports. Grain imports for 1982/83 are estimated at 110,000 tons, down 64,000 tons from the previous year. Smaller expected gains in cereal output and further growth in population suggest that import needs in grain equivalent may increase to 197,000 tons in 1983/84, to maintain consumption at historical levels. To meet the FAO minimum, Guinea would need to import almost 450,000 tons of grain next year.

Exports of bauxite and aluminum account for more than 95 percent of Guinea's foreign exchange earnings, making the country more vulnerable than any other in the region to fluctuations in world mineral prices. Exports are expected to strengthen in 1983 because of increasing demand from industrialized countries. But Guinea's external debt--currently estimated at more than $1 billion--will curtail the country's ability to finance its food imports in 1983/84. Guinea will require concessional assistance for over 58 percent of its status quo cereal import requirements in 1983/84, or for 75 percent of the amount needed for the FAO recommended minimum.

Guinea-Bissau

Rice production returned to normal in 1982/83 following 3 years of weather-induced lows. However, imports did not decline, and per capita cereal availabilities increased 15 percent to 138 kilograms. About 75 percent of Guinea-Bissau's rice imports--which account for the major portion of cereal purchases--are supplied on concessional terms. The country's import capacity is calculated at only 11,000 tons in grain equivalent, compared with 36,000 tons needed to maintain historical consumption levels. But due to inadequate caloric content of the average diet, Guinea-Bissau would require imports of more than 40,000 tons of grain to meet the FAO minimum standard.

Fishery products, peanuts, and palm oil products furnish up to 80 percent of export earnings in Guinea-Bissau. But the country suffers from a chronic trade deficit, with imports running five times the level of exports. This deficit is expected to widen in 1983. Furthermore, debt service is projected to average about $10 million during the mid-1980's--or about half of expected export earnings--severely constraining the country's ability to pay for needed food purchases.

Liberia

Rice is the most important food in the Liberian diet, with annual per capita consumption averaging almost 140 kilograms. Production fell 5 percent in 1982/83, to 160,000 tons, milled basis. Imports consequently increased to 110,000 tons, of which 45,000 were supplied under a P.L. 480 agreement with the United States. Production of cassava, the other major staple food, increased slightly to 195,000 tons.

On the financial side, Liberia's exports declined significantly in 1982 because of weak worldwide demand for iron ore, rubber, and timber, which make up more than 80 percent of the nation's total exports. Liberia nevertheless maintained a positive trade balance in 1982, as imports of all goods and services fell even more rapidly than exports. Recovery in the industrialized countries should strengthen demand for Liberia's exports this year. By 1984, Liberia's trade surplus is expected to top $200 million.

Food import needs for 1983/84 are projected at 137,000 tons in grain equivalent. Despite Liberia's healthy current accounts, nagging debt-service obligations of $75 million in 1982 kept currency reserves low. By the end of 1983, Liberia is expected to have less than 2 weeks' supply of reserves left to cover imports. As a result, an estimated 62,000 tons of required cereal imports must be supplied concessionally in 1983/84. Historically, Liberia's aggregate food consumption has more than met the FAO minimum.

Mali

Most of eastern and central Mali suffered drought in 1982, causing this year's harvest to be the second lowest since the devastating 1973 drought. The Government of Mali has already appealed for emergency assistance to meet a critical cereal deficit. An FAO-sponsored multidonor team concluded that emergency food aid would be needed to avoid famine during 1983, particularly in the northeastern part of the country. The United States has offered Mali 10,000 tons of cereal as emergency assistance under P.L. 480 Title II.

Even under more normal circumstances, a large proportion of Mali's cereal imports usually consists of food aid. Major policy reforms are now being implemented to free Mali from this dependence by encouraging increased food production and phasing out consumer food subsidies. The reforms are part of a multidonor program that provides food aid to support policy changes. Unfortunately, much of Mali's population will still suffer serious dietary deficiencies. To meet FAO's minimum, dramatically higher cereal imports would be needed.

Even if cereal production recovers to over 1 million tons in 1983/84, Mali's cereal import requirements could still measure in excess of 160,000 tons, up from 130,000 in 1982/83--an increase resulting from population growth and growing urban demand for imported wheat and rice. At the same time, limited export opportunities are constraining Mali's foreign exchange earnings. The 1982 drought will reduce 1983 exports of cotton and livestock--Mali's primary sources of foreign exchange. And, like nearby Liberia, Mali has currency reserves that are expected to equal less than 2 weeks' import coverage by the end of 1983. Nearly 80 percent of Mali's 1983/84 cereal import requirements must be concessionally financed or foregone.

Mauritania

Poor rainfall and extensive grasshopper damage decimated harvests in Mauritania this year, reducing cereal output in 1982/83 to less than two-thirds of the previous year's level and to half of earlier forecasts. The Senegal River crested lower than usual, damaging flood recession crops. Livestock suffered considerably because of poor pasture conditions.

Record cereal imports were needed to prop up per capita food supplies. The poor performance of Mauritania's agriculture in 1982/83 exacerbated the country's chronic struggle with food deficits. Cereal production has accounted for an average of only 30 percent of consumption in the past 6 years. Meat and milk have become necessary supplements for nationally low per capita cereal consumption.

Mauritania's financial situation is mixed. Given recently depressed world prices for minerals, Mauritania's dependence upon them for nearly 90 percent of export earnings has restrained growth in income. Nearly two-thirds of Government

spending is financed by foreign assistance. The foreign debt is so large that debt service may account for as much as one-half of export earnings in 1983. But currency reserves are estimated to be ample, likely to reach $120 million by the end of 1983.

Assuming a modest increase in production and maintenance of current low caloric intake levels, cereal import requirements for 1983/84 are projected at 162,000 tons. However, these imports would be nearly 30 percent below those required to bring caloric intake up to the FAO recommended minimum.

Niger

Niger continues to struggle with the problems of development. Per capita GNP is less than $350. The economy consists primarily of subsistence agriculture, with over 90 percent of the work force engaged in farming. Niger's literacy rate of 5 percent is, along with Upper Volta's, the lowest in the world.

Below-normal harvests occurred for the second year in a row in Niger during 1982/83, further complicating difficult economic problems. Drought in the western half of the country's crop-producing region and below-normal rainfall in the south reduced yields in both areas. Only in eastern Niger were crop conditions about normal. Overall cereal production of about 1.1 million tons represented a decline of 14 percent from last year's already disappointing level. The Government estimates that a deficit of 70,000 tons of cereals was met through stocks, commercial purchases, and previously pledged food aid. Even with those food sources, per capita cereal supplies declined 14 percent from levels maintained in 1982/83. Except for imports of rice and some wheat, Niger's cereal consumption consists almost exclusively of millet and sorghum.

A slowdown in uranium exports in 1982 ended the brief earnings boom that Niger had enjoyed in recent years, resulting in a virtual halt to economic growth. Real growth in GDP peaked at 13 percent in 1979. In response to its severe economic problems, Niger has instituted policy and institutional reforms under an IMF stabilization program.

With economic growth not expected to exceed 1 percent in 1983, Niger's dependence on foreign assistance will increase. Assuming cereal production recovers to 1.5 million tons in 1983/84, the country will still need concessional financing for 80 percent of projected status quo 1983/84 cereal import requirements, which total 180,000 tons. Cereal consumption in Niger exceeds the FAO recommended minimum.

Senegal

Below-normal rainfall in northern Senegal throughout the growing season is estimated to have reduced millet and sorghum production in 1982/83 by over 200,000 tons--or about one-quarter--from last year's output. However, farmer-held stocks are deemed adequate, following last year's surplus output, to make up a portion of this shortfall. Rice production declined also, ensuring that Senegal will once again look to cereal imports to supplement domestic food supplies.

A growing reliance on rice imports, coupled with increased demand for cereals because of rising per capita intake in urban areas, will generate a 1983/84 cereal import requirement estimated at 367,000 tons, primarily rice. Senegal continues to have a large structural rice deficit, because of urban growth and consumer preference for this cereal. Import requirements for wheat in 1983/84 will also follow the upward trend. Most of Senegal's food imports are purchased commercially, although in 1983 small quantities of rice will be supplied by the United States under P.L. 480.

Senegal's financial problem has grown to critical proportions. Already-large trade deficits are swelling, and debt-service payments are at record levels. Even worse, Senegal's currency reserves are estimated to be among the lowest in the world. By the end of 1983 Senegal is forecast to be holding only enough foreign exchange to cover 1.8 days' worth of imports. Only a sustained recovery of peanut exports, coupled with success of the major policy and institutional reforms begun under an IMF standby agreement, will improve prospects for economic recovery in 1983. Though no food aid needs are indicated for Senegal, allowing for more adequate levels of reserves would result in appreciable food aid needs, possibly 50-75,000 tons of cereal.

Sierra Leone

Rice and cassava are the two most important food crops produced in Sierra Leone. The 1982/83 rice harvest returned to normal after a sharp decline in 1981/82. Cassava output continues to increase, but at a slower rate than population, leaving per capita supplies of roots and tubers a fraction of a percent lower than last year. Sierra Leone is importing increasing quantities of wheat and rice to satisfy the demand of urban consumers for cereals and convenience foods.

Sierra Leone's financial position has stagnated in recent years because of weak demand and low prices for its major mineral and agricultural exports--diamonds, iron ore, bauxite, coffee, cocoa, and palm kernels. The country is also experiencing a critical shortage of foreign exchange, which has hampered normal commercial and industrial activity. The Marampa iron ore mines were officially reopened in December 1982, and exports were scheduled to resume in early 1983. Assuming recovery in the industrialized countries in 1983 and increased output from iron ore producers, Sierra Leone's financial position could improve significantly.

To maintain consumption at historical levels, Sierra Leone's 1983/84 cereal import needs are projected at 77,000 tons, grain equivalent. The low level of rice imports during some years of the base period gives a downward bias to the projections, however. Actual imports are likely to be near the 1982/83 level of 120,000 tons, placing per capita consumption slightly above the minimum recommended by FAO. Sierra Leone's food aid needs for 1983/84 are estimated at 27,000 tons.

Togo

A small increase in Togo's 1982/83 cereal production was offset by population growth during the same year, while root and tuber production declined over 5 percent. As a result, per capita output fell about 4 percent between 1981/82 and 1982/83. Total agricultural production sank to only 80 percent of the 1969-71 level. Localized food shortages occurred in Savannah and Kara regions, aggravated by the influx of approximately 1 million Ghanaians expelled from Nigeria in January and February of 1983. Many were forced to remain in Togo for several days because the Ghana border was closed. Emergency food aid temporarily relieved the strain on Togo's resources, and most of the Ghanaians have now left.

Togo's trade deficit is expected to continue growing in 1983, in part because of slow recovery of world prices for phosphates. Togo depends upon mineral exports for well over half of its export earnings. Also, 1983 debt-service obligations could equal three-quarters of projected export earnings. Togo's cereal import needs are, fortunately, relatively small--60,000 tons projected for 1983/84, compared with 1982/83 imports of 55,000 tons of wheat and rice. But the country is expected to need concessional assistance for as much as 44,000 tons of the requirement in 1983/84. To meet the FAO minimum, Togo would need to import 135,000 tons of grain. The large difference is due to the country's heavy reliance upon starchy roots and tubers such as yams and cassava, which have fewer calories by weight than cereals.

Upper Volta

Despite dry weather in Upper Volta at the end of the 1982/83 growing season, cereal production is estimated to roughly equal last year's 1.3 million tons. This production has held import requirements to manageable levels.

Assuming slightly increased production in 1983/84, import requirements to maintain current per capita intake levels could decline to about 40,000 tons. However, the problem of dietary deficiency in Upper Volta is particularly severe. Current per capita intake levels supply less than 85 percent of recommended caloric requirements. Bringing per capita intake up to the FAO minimum would require nearly an eightfold increase in cereal imports.

Upper Volta has in recent years relied on aid to cover up to two-thirds of its food imports. Agricultural stagnation and changing consumption patterns have contributed to the slow but steady increase in food imports, which now comprise about 5 percent of domestic consumption. Low world prices for Upper Volta's agricultural exports have reduced purchasing power and led to rapid growth in external debt. Though only 6,000 tons of food aid are estimated necessary to prevent any further deterioration in the current low per capita consumption rate, nearly 270,000 tons of cereal food aid would be required to upgrade diets to nutritionally adequate levels.

Table 15.--West Africa basic food data

Country/commodity	Actual or forecast production	Actual or targeted beginning stocks	Net imports	Use: Nonfeed use	Use: Feed use	Use: Total use	Actual or targeted ending stocks	Actual or forecast population	Per capita nonfeed use	Commodities covered and share of daily per capita caloric intake: Commodity	Percent
	1,000 tons							Thousands	Kilos		
Benin											
Major cereals										Wheat	2.2
1979/80-1982/83	353	0	81	434	0	434	0	2,905	120	Rice	2.8
1982/83 prel.	367	0	80	447	0	447	0	3,056	117	Corn	22.6
1983/84 est.	390	0	--	--	0	--	0	3,142	--	Cassava	22.7
1984/85 est.	413	0	--	--	0	--	0	3,230	--	Sorghum	6.1
										Millet	1.0
										Yams	13.4
										Total	70.7
Roots and tubers											
1979/80-1982/83	1,328	0	0	1,328	0	1,328	0	3,631	366		
1982/83 prel.	1,375	0	0	1,375	0	1,375	0	3,820	360		
1983/84 est.	1,425	0	--	--	0	--	0	3,927	--		
1984/85 est.	1,475	0	--	--	0	--	0	4,037	--		
Cameroon											
Major cereals										Wheat	3.4
1979/80-1982/83	846	0	198	1,044	0	1,044	0	8,907	117	Rice	2.6
1982/83 prel.	900	0	210	1,110	0	1,110	0	9,367	118	Corn	14.4
1983/84 est.	911	0	--	--	0	--	0	9,601	--	Cassava	9.5
1984/85 est.	942	0	--	--	0	--	0	9,841	--	Millet	13.2
										Plantains	7.7
										Peanuts	9.9
										Yams and potatoes	4.8
										Total	65.5
Roots and tubers											
1979/80-1982/83	3,700	0	0	3,700	0	3,700	0	8,907	415		
1982/83 prel.	3,930	0	0	3,930	0	3,930	0	9,367	420		
1983/84 est.	4,010	0	--	--	0	--	0	9,601	--		
1984/85 est.	4,042	0	--	--	0	--	0	9,841	--		
Peanuts											
1979/80-1982/83	169	0	0	169	0	169	0	8,907	19		
1982/83 prel.	180	0	0	180	0	180	0	9,367	19		
1983/84 est.	170	0	--	--	0	--	0	9,601	--		
1984/85 est.	182	0	--	--	0	--	0	9,841	--		
Cape Verde											
Major cereals										Wheat	4.7
1979/80-1982/83	5	0	52	56	0	56	0	339	166	Rice	3.9
1982/83 prel.	4	0	48	52	0	52	0	350	149	Corn	43.2
1983/84 est.	4	0	--	--	0	--	0	345	--	Pulses	6.2
1984/85 est.	5	0	--	--	0	--	0	342	--	Total	57.9
Pulses											
1979/80-1982/83	4	0	0	4	0	4	0	339	13		
1982/83 prel.	3	0	0	3	0	3	0	350	9		
1983/84 est.	3	0	--	--	0	--	0	345	--		
1984/85 est.	4	0	--	--	0	--	0	342	--		
Chad											
Major cereals										Wheat	1.8
1979/80-1982/83	526	0	52	577	0	577	0	4,672	124	Rice	3.3
1982/83 prel.	525	0	78	603	0	603	0	4,854	124	Corn	1.5
1983/84 est.	542	0	--	--	0	--	0	4,994	--	Cassava	6.1
1984/85 est.	556	0	--	--	0	--	0	5,138	--	Millet	50.0
										Total	62.7
Roots and tubers											
1979/80-1982/83	178	0	0	178	0	178	0	4,672	38		
1982/83 prel.	175	0	0	175	0	175	0	4,854	36		
1983/84 est.	179	0	--	--	0	--	0	4,994	--		
1984/85 est.	182	0	--	--	0	--	0	5,138	--		

Continued--

Table 15.--West Africa basic food data--continued

Country/commodity	Actual or forecast production	Actual or targeted beginning stocks	Net imports	Use: Nonfeed use	Use: Feed use	Use: Total use	Actual or targeted ending stocks	Actual or forecast population	Per capita nonfeed use	Commodities covered and share of daily per capita caloric intake: Commodity	Percent
	1,000 tons							Thousands	Kilos		
Gambia											
Major cereals										Wheat	2.4
1979/80-1982/83	58	0	44	102	0	102	0	612	166	Rice	35.8
1982/83 prel.	59	0	43	102	0	102	0	639	160	Corn	3.6
1983/84 est.	61	0	--	--	0	--	0	659	--	Millet	16.2
1984/85 est.	64	0	--	--	0	--	0	679	--	Peanuts	6.8
										Total	64.7
Peanuts											
1979/80-1982/83	113	0	-85	28	0	28	0	612	46		
1982/83 prel.	150	0	-115	35	0	35	0	639	55		
1983/84 est.	120	0	--	--	0	--	0	659	--		
1984/85 est.	125	0	--	--	0	--	0	679	--		
Ghana											
Major cereals										Wheat	4.4
1979/80-1982/83	625	0	202	757	70	827	0	12,150	62	Rice	2.6
1982/83 prel.	637	0	185	752	70	822	0	12,839	59	Corn	11.8
1983/84 est.	680	0	--	--	76	--	0	13,186	--	Cassava	20.2
1984/85 est.	722	0	--	--	78	--	0	13,542	--	Sorghum	4.0
										Millet	3.1
										Plantains	11.3
										Cocoyams	11.4
										Total	68.8
Roots and tubers											
1979/80-1982/83	5,319	0	0	5,319	0	5,319	0	12,150	438		
1982/83 prel.	5,350	0	0	5,350	0	5,350	0	12,839	417		
1983/84 est.	5,700	0	--	--	0	--	0	13,186	--		
1984/85 est.	5,900	0	--	--	0	--	0	13,542	--		
Guinea											
Major cereals										Wheat	2.0
1979/80-1982/83	547	46	141	702	0	702	32	5,655	124	Rice	27.4
1982/83 prel.	553	35	110	698	35	698	0	5,891	118	Corn	24.7
1983/84 est.	565	0	--	--	0	--	0	6,055	--	Cassava	12.3
1984/85 est.	570	0	--	--	0	--	0	6,244	--	Total	66.4
Roots and tubers											
1979/80-1982/83	497	0	0	497	0	497	0	5,655	88		
1982/83 prel.	514	0	0	514	0	514	0	5,891	87		
1983/84 est.	510	0	--	--	0	--	0	6,055	--		
1984/85 est.	515	0	--	--	0	--	0	6,244	--		
Guinea-Bissau											
Major cereals										Rice	42.2
1979/80-1982/83	37	3	47	81	0	81	5	655	123	Corn	7.1
1982/83 prel.	44	0	49	93	0	93	0	673	138	Sorghum	2.8
1983/84 est.	48	0	--	--	0	--	0	685	--	Total roots	6.9
1984/85 est.	49	0	--	--	0	--	0	696	--	Total	59.0
Roots and tubers											
1979/80-1982/83	41	0	0	41	0	41	0	655	63		
1982/83 prel.	43	0	0	43	0	43	0	673	64		
1983/84 est.	44	0	--	--	0	--	0	685	--		
1984/85 est.	45	0	--	--	0	--	0	696	--		
Liberia											
Major cereals										Wheat	2.2
1979/80-1982/83	163	19	115	280	0	280	16	1,873	149	Rice	42.1
1982/83 prel.	160	20	125	305	0	305	0	1,959	156	Cassava	21.0
1983/84 est.	165	0	--	--	0	--	0	2,020	--	Total	65.4
1984/85 est.	169	0	--	--	0	--	0	2,146	--		
Roots and tubers											
1979/80-1982/83	187	0	0	187	0	187	0	1,873	100		
1982/83 prel.	195	0	0	195	0	195	0	1,959	100		
1983/84 est.	200	0	--	--	0	--	0	2,020	--		
1984/85 est.	205	0	--	--	0	--	0	2,146	--		

Continued--

Table 15.--West Africa basic food data--continued

Country/commodity	Actual or forecast production	Actual or targeted beginning stocks	Net imports	Use: Nonfeed use	Use: Feed use	Use: Total use	Actual or targeted ending stocks	Actual or forecast population	Per capita nonfeed use	Commodities covered and share of daily per capita caloric intake: Commodity	Percent
	1,000 tons							Thousands	Kilos		
Mali											
Major cereals										Wheat	2.0
1979/80-1982/83	1,025	0	100	1,125	0	1,125	0	6,741	167	Rice	10.8
1982/83 prel.	974	0	130	1,104	0	1,104	0	7,022	157	Corn	5.0
1983/84 est.	1,045	0	--	--	0	--	0	7,239	--	Millet	53.5
1984/85 est.	1,105	0	--	--	0	--	0	7,463	--	Total	71.8
Mauritania											
Major cereals										Wheat	10.8
1979/80-1982/83	35	11	146	184	0	184	8	1,520	121	Rice	10.9
1982/83 prel.	26	10	180	206	0	206	10	1,569	131	Corn	3.0
1983/84 est.	32	10	--	--	0	--	10	1,603	--	Millet	27.5
1984/85 est.	35	10	--	--	0	--	10	1,642	--	Other grains	1.5
										Total	53.6
Niger											
Major cereals										Wheat	1.3
1979/80-1982/83	1,446	0	112	1,558	0	1,558	0	5,583	280	Rice	1.9
1982/83 prel.	1,114	0	160	1,274	0	1,274	0	5,825	219	Millet and sorghum	63.4
1983/84 est.	1,500	0	--	--	0	--	0	5,994	--	Total	66.6
1984/85 est.	1,531	0	--	--	0	--	0	6,168	--		
Senegal											
Wheat										Wheat	9.8
1979/80-1982/83	0	0	102	102	0	102	0	5,760	18	Rice	23.7
1982/83 prel.	0	0	100	100	0	100	0	5,992	17	Corn	4.4
1983/84 est.	0	0	--	--	0	--	0	6,153	--	Millet	24.2
1984/85 est.	0	0	--	--	0	--	0	6,318	--	Total	62.1
Rice											
1979/80-1982/83	60	70	288	367	0	367	51	5,760	64		
1982/83 prel.	60	68	300	428	0	428	68	5,992	71		
1983/84 est.	70	0	--	--	0	--	0	6,153	--		
1984/85 est.	75	0	--	--	0	--	0	6,318	--		
Other cereals											
1979/80-1982/83	619	0	26	645	0	645	0	5,760	112		
1982/83 prel.	551	0	20	571	0	571	0	5,992	95		
1983/84 est.	752	0	--	--	0	--	0	6,153	--		
1984/85 est.	803	0	--	--	0	--	0	6,318	--		
Sierra Leone											
Major cereals										Wheat	2.6
1979/80-1982/83	316	0	83	399	0	399	0	3,420	117	Rice	42.6
1982/83 prel.	340	0	120	460	0	460	0	3,532	130	Cassava	21.4
1983/84 est.	350	0	--	--	0	--	0	3,609	--	Total	66.6
1984/85 est.	360	0	--	--	0	--	0	3,688	--		
Roots and tubers											
1979/80-1982/83	636	0	0	636	0	636	0	3,420	186		
1982/83 prel.	648	0	0	648	0	648	0	3,532	183		
1983/84 est.	655	0	--	--	0	--	0	3,609	--		
1984/85 est.	660	0	--	--	0	--	0	3,688	--		
Togo											
Major cereals										Wheat	1.9
1979/80-1982/83	301	0	52	353	0	353	0	2,673	132	Rice	3.6
1982/83 prel.	303	0	55	358	0	358	0	2,830	126	Corn	19.4
1983/84 est.	314	0	--	--	0	--	0	2,915	--	Cassava	19.7
1984/85 est.	335	0	--	--	0	--	0	3,002	--	Millet	15.0
										Yams	15.5
										Total	75.1
Roots and tubers											
1979/80-1982/83	934	0	0	934	0	934	0	2,673	350		
1982/83 prel.	970	0	0	970	0	970	0	2,830	343		
1983/84 est.	1,050	0	--	--	0	--	0	2,915	--		
1984/85 est.	1,100	0	--	--	0	--	0	3,002	--		

Continued--

Table 15.--West Africa basic food data--continued

Country/commodity	Actual or forecast production	Actual or targeted beginning stocks	Net imports	Use: Nonfeed use	Use: Feed use	Use: Total use	Actual or targeted ending stocks	Actual or forecast population	Per capita nonfeed use	Commodities covered and share of daily per capita caloric intake: Commodity	Percent
	1,000 tons							Thousands	Kilos		
Upper Volta											
Major cereals										Wheat	1.2
1979/80-1982/83	1,189	0	76	1,265	0	1,265	0	6,894	183	Rice	2.9
1982/83 prel.	1,291	0	65	1,356	0	1,356	0	7,131	190	Corn	5.3
1983/84 est.	1,299	0	--	--	0	--	0	7,295	--	Millet and sorghum	62.4
1984/85 est.	1,322	0	--	--	0	--	0	7,463	--	Total	71.8
West Africa, total											
Major cereals											
1979/80-1982/83	8,148	148	1,914	10,029	70	10,099	112	--	--		
1982/83 prel.	7,908	133	2,058	10,019	70	10,089	10	--	--		
1983/84 est.	8,728	10	--	--	76	--	10	--	--		
1984/85 est.	9,056	10	--	--	78	--	10	--	--		
Roots and tubers											
1979/80-1982/83	13,101	0	-85	13,016	0	13,016	0	--	--		
1982/83 prel.	13,530	0	-115	13,415	0	13,415	0	--	--		
1983/84 est.	14,063	0	--	--	0	--	0	--	--		
1984/85 est.	14,431	0	--	--	0	--	0	--	--		
Pulses											
1979/80-1982/83	4	0	0	4	0	4	0	--	--		
1982/83 prel.	3	0	0	3	0	3	0	--	--		
1983/84 est.	3	0	--	--	0	--	0	--	--		
1984/85 est.	4	0	--	--	0	--	0	--	--		

-- Not applicable.

Table 16.--West Africa food requirements, import requirements, and food aid needs to support consumption, status quo- and nutrition-based estimates

Country/ commodity	Forecast domestic production	Total use 1/		Import requirements				Commercial import capacity		Food aid needs			
				Quantity		Value				Quantity		Value	
		Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based	1,000 tons	Million dollars	Status quo	Nutrit. based	Status quo	Nutrit. based
	1,000 tons					Million dollars		1,000 tons	Million dollars	1,000 tons		Million dollars	
Benin													
Major cereals													
1983/84	390	470	398	80	8	--	--	--	--	--	--	--	--
1984/85	413	483	410	70	-3	--	--	--	--	--	--	--	--
Roots and tubers													
1983/84	1,425	1,438	1,402	13	-23	--	--	--	--	--	--	--	--
1984/85	1,475	1,479	1,442	4	-33	--	--	--	--	--	--	--	--
Total 2/													
1983/84	--	--	--	86	0	20	0	40	9	46	0	11	0
1984/85	--	--	--	72	0	17	0	32	8	40	0	10	0
Cameroon													
Major cereals													
1983/84	911	1,127	1,093	216	182	--	--	--	--	--	--	--	--
1984/85	942	1,155	1,122	213	180	--	--	--	--	--	--	--	--
Roots and tubers													
1983/84	2,585	2,472	2,583	-21	-942	--	--	--	--	--	--	--	--
1984/85	2,642	2,533	3,126	47	-921	--	--	--	--	--	--	--	--
Peanuts													
1983/84	170	182	262	12	92	--	--	--	--	--	--	--	--
1984/85	182	187	270	5	88	--	--	--	--	--	--	--	--
Total 2/													
1983/84	--	--	--	213	0	50	0	183	43	31	0	7	0
1984/85	--	--	--	223	0	54	0	196	48	27	0	6	0
Cape Verde													
Major cereals													
1983/84	4	57	49	53	45	8	7	20	3	5/ 28	5/ 22	5/ 4	5/ 3
1984/85	5	57	49	52	44	8	7	20	3	23	18	4	3
Pulses													
1983/84	3	4	6	1	3	3/	3/	4	1	0	0	0	0
1984/85	4	4	6	0	2	0	3/	4	1	0	0	0	0
Total													
1983/84	--	--	--	--	--	8	7	--	4	--	--	4	3
1984/85	--	--	--	--	--	8	7	--	4	--	--	4	3
Chad													
Major cereals													
1983/84	542	617	905	75	363	--	--	--	--	--	--	--	--
1984/85	556	635	931	79	375	--	--	--	--	--	--	--	--
Roots and tubers													
1983/84	179	190	258	11	79	--	--	--	--	--	--	--	--
1984/85	182	195	265	13	83	--	--	--	--	--	--	--	--
Total 2/													
1983/84	--	--	--	80	395	77	384	5	5	75	390	73	379
1984/85	--	--	--	84	408	86	414	5	5	80	404	81	409
Gambia													
Major cereals													
1983/84	61	110	108	49	47	--	--	--	--	--	--	--	--
1984/85	64	113	111	49	47	--	--	--	--	--	--	--	--
Peanuts													
1983/84	120	30	70	-90	-50	--	--	--	--	--	--	--	--
1984/85	125	31	73	-94	-52	--	--	--	--	--	--	--	--
Total 2/													
1983/84	--	--	--	0	0	0	0	20	3	0	0	0	0
1984/85	--	--	--	0	0	0	0	24	4	0	0	0	0

(Footnotes at end of table.)

Continued--

Table 16.--West Africa food requirements, import requirements, and food aid needs to support consumption, status quo- and nutrition-based estimates--continued

Country/ commodity	Forecast domestic production	Total use 1/		Import requirements				Commercial import capacity		Food aid needs			
				Quantity		Value				Quantity		Value	
		Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based			Status quo	Nutrit. based	Status quo	Nutrit. based
	1,000 tons					Million dollars		1,000 tons	Million dollars	1,000 tons		Million dollars	
Ghana													
Major cereals													
1983/84	680	898	1,095	218	415	--	--	--	--	--	--	--	--
1984/85	722	922	1,129	200	407	--	--	--	--	--	--	--	--
Roots and tubers													
1983/84	5,700	5,778	6,000	78	300	--	--	--	--	--	--	--	--
1984/85	5,900	5,934	6,174	34	274	--	--	--	--	--	--	--	--
Total 2/													
1983/84	--	--	--	247	538	74	161	80	24	166	458	50	137
1984/85	--	--	--	212	520	66	162	78	24	134	442	42	138
Guinea													
Major cereals													
1983/84	565	753	949	188	384	--	--	--	--	--	--	--	--
1984/85	570	776	976	206	406	--	--	--	--	--	--	--	--
Roots and tubers													
1983/84	510	533	670	23	160	--	--	--	--	--	--	--	--
1984/85	515	549	688	34	173	--	--	--	--	--	--	--	--
Total 2/													
1983/84	--	--	--	197	449	66	149	111	37	86	338	29	113
1984/85	--	--	--	220	476	77	165	120	42	100	356	35	124
Guinea-Bissau													
Major cereals													
1983/84	48	84	89	36	41	--	--	--	--	--	--	--	--
1984/85	49	86	91	37	42	--	--	--	--	--	--	--	--
Roots and tubers													
1983/84	44	43	42	-1	-2	--	--	--	--	--	--	--	--
1984/85	45	44	43	-1	-2	--	--	--	--	--	--	--	--
Total 2/													
1983/84	--	--	--	36	41	13	15	11	4	25	30	9	11
1984/85	--	--	--	36	41	14	16	11	4	25	30	10	11
Liberia													
Major cereals													
1983/84	165	302	231	137	66	--	--	--	--	--	--	--	--
1984/85	169	320	245	151	76	--	--	--	--	--	--	--	--
Roots and tubers													
1983/84	200	201	325	1	125	--	--	--	--	--	--	--	--
1984/85	205	214	345	9	140	--	--	--	--	--	--	--	--
Total 2/													
1983/84	--	--	--	137	110	54	43	75	29	62	35	24	14
1984/85	--	--	--	155	125	63	51	78	32	77	47	32	19
Mali													
Major cereals													
1983/84	1,045	1,210	1,825	165	780	71	334	36	16	129	743	55	318
1984/85	1,105	1,247	1,893	142	788	63	352	35	16	107	753	48	336
Mauritania													
Major cereals													
1983/84	32	194	240	162	208	29	37	45	8	116	162	21	29
1984/85	35	198	246	163	211	31	39	64	12	100	147	19	28

(Footnotes at end of table).

Continued--

Table 16.--West Africa food requirements, import requirements, and food aid needs to support consumption, status quo- and nutrition-based estimates--continued

Country/ commodity	Forecast domestic production	Total use 1/		Import requirements				Commercial import capacity		Food aid needs			
				Quantity		Value				Quantity		Value	
		Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based	1,000 tons	Million dollars	Status quo	Nutrit. based	Status quo	Nutrit. based
	1,000 Tons					Million dollars		1,000 tons	Million dollars	1,000 tons		Million dollars	
Niger													
Major cereals													
1983/84	1,500	1,680	1,652	180	152	60	51	37	12	143	115	48	38
1984/85	1,531	1,729	1,697	198	166	69	58	40	14	157	126	55	44
Senegal													
Wheat													
1983/84	0	109	197	109	197	--	--	--	--	--	--	--	--
1984/85	0	112	202	112	202	--	--	--	--	--	--	--	--
Rice													
1983/84	70	391	365	321	295	--	--	--	--	--	--	--	--
1984/85	75	402	375	327	300	--	--	--	--	--	--	--	--
Other cereals													
1983/84	752	689	737	-63	-15	--	--	--	--	--	--	--	--
1984/85	803	707	762	-96	-41	--	--	--	--	--	--	--	--
Total 2/													
1983/84	--	--	--	367	477	82	106	4/ 409	4/ 91	4/ 0	68	4/ 0	15
1984/85	--	--	--	343	461	80	107	455	106	0	6	0	1
Sierra Leone													
Major cereals													
1983/84	350	421	421	71	71	--	--	--	--	--	--	--	--
1984/85	360	430	431	70	71	--	--	--	--	--	--	--	--
Roots and tubers													
1983/84	655	671	623	16	-32	--	--	--	--	--	--	--	--
1984/85	660	686	636	26	-24	--	--	--	--	--	--	--	--
Total 2/													
1983/84	--	--	--	77	58	25	19	51	16	27	7	9	2
1984/85	--	--	--	80	61	27	20	52	17	29	9	10	3
Togo													
Major cereals													
1983/84	314	385	400	71	86	--	--	--	--	--	--	--	--
1984/85	335	397	415	62	80	--	--	--	--	--	--	--	--
Roots and tubers													
1983/84	1,050	1,020	1,194	-30	144	--	--	--	--	--	--	--	--
1984/85	1,100	1,050	1,234	-50	134	--	--	--	--	--	--	--	--
Total 2/													
1983/84	--	--	--	61	135	16	36	17	4	44	118	12	31
1984/85	--	--	--	45	125	12	34	19	5	25	105	7	29
Upper Volta													
Major cereals													
1983/84	1,299	1,337	1,599	38	300	13	101	33	11	6	267	2	90
1984/85	1,322	1,368	1,635	46	313	16	109	31	11	15	281	5	98
West Africa, total													
Total, major cereals and roots/tubers 2/													
1983/84	--	--	--	2,099	3,685	656	1,441	--	--	985	2,754	353	1,180
1984/85	--	--	--	2,071	3,738	682	1,535	--	--	938	2,724	361	1,243
Pulses													
1983/84	--	--	--	1	3	0	1	--	--	0	0	0	0
1984/85	--	--	--	0	2	0	1	--	--	0	0	0	0
Total													
1983/84	--	--	--	--	--	657	1,442	--	--	--	--	353	1,180
1984/85	--	--	--	--	--	683	1,535	--	--	--	--	361	1,243

1/ The sum of targeted nonfeed and feed use.
2/ Cereal equivalent.
3/ Less than 1.
4/ Assumes no adjustment in low level of reserves relative to imports. Adjustments of reserves to subregion average would result in substantial food aid needs. See narrative.
5/ Surplus pulse capacity offsets cereal aid needs.
-- Not applicable.

Table 17.--Summary of West Africa cereal import requirements and food aid needs to support consumption, status quo- and nutrition-based estimates

Country	1982/83 imports	1983/84 import requirements: Status quo	1983/84 import requirements: Nutrit. based	1983/84 aid needs: Status quo	1983/84 aid needs: Nutrit. based
	1,000 tons				
Benin	80	86	1/	46	0
Cameroon	210	213	0	31	0
Cape Verde	48	53	45	28	22
Chad	78	80	395	75	390
Gambia	43	0	0	0	0
Ghana	185	247	538	166	458
Guinea	110	197	449	86	338
Guinea-Bissau	49	36	41	25	30
Liberia	125	137	110	62	35
Mali	130	165	780	129	743
Mauritania	180	162	208	116	162
Niger	160	180	152	143	115
Senegal	420	367	477	2/ 0	68
Sierra Leone	120	77	58	27	7
Togo	55	61	135	44	118
Upper Volta	65	38	300	6	267
West Africa, total	2,058	2,099	3,685	985	2,754

1/ Less than 1.
2/ Assumes no adjustment in low level of reserves relative to imports. Adjustment of reserves to subregion average would result in substantial food aid needs. See narrative.

Table 18.--West Africa financial indicators, actual and projected

Country and year	International reserves (yearend)	Exports (f.o.b.)	Imports (f.o.b.)	Debt service due	1983 and 1984 conditions as of April 1983
		Million dollars			
Benin					
1979-82	23	193	389	21	Imports and exports declined in 1982 owing to devaluation of the French franc, to which the African Financial Community (CFA) is pegged. In CFA terms, exports improved in 1982 because of higher production of palm products, coffee, and cotton. Increasing debt-service payments--reflecting a recent investment drive--will likely widen BOP deficit.
1982 prel.	10	185	370	51	
1983 est.	5	175	370	59	
1984 est.	5	180	386	78	
Cameroon					
1979-82	129	1,736	1,291	204	Increased oil exports created a balance-of-payments surplus, more than offsetting declining revenues from Cameroon's traditional agricultural exports--coffee, cocoa, and timber. External borrowing has slowed as petroleum earnings have provided domestic resources to finance investments.
1982 prel.	115	2,162	1,265	301	
1983 est.	130	2,400	1,400	301	
1984 est.	150	2,650	1,550	308	
Cape Verde					
1979-82	26	6	53	21	Limited resource base accounts for the size and growth of chronic trade deficit. Large remittance and aid flows are needed to finance the trade deficit.
1982 prel.	25	4	60	51	
1983 est.	25	4	65	59	
1984 est.	25	5	70	78	
Chad					
1979-82	6	108	139	15	Exports estimated down in 1982 in dollar terms while imports stagnated. Continuing internal disarray and slumping cotton market could keep export growth slow.
1982 prel.	0	91	150	11	
1983 est.	10	91	140	9	
1984 est.	10	96	145	13	
Gambia					
1979-82	4	45	121	3	Good peanut harvest in 1982 increased export earnings. Yet debt-servicing burden is forcing Gambia to become increasingly dependent on grants to finance imports.
1982 prel.	3	34	118	7	
1983 est.	3	35	126	11	
1984 est.	3	44	136	12	
Ghana					
1979-82	191	916	806	69	Low cocoa prices and quantities pushed down 1982 export earnings. Foreign exchange shortages forced Government to limit imports, but the trade deficit continued to increase. Weak outlook for cocoa market is likely to limit export earnings over the next few years.
1982 prel.	126	670	730	63	
1983 est.	120	714	868	74	
1984 est.	120	721	879	76	
Guinea					
1979-82	26	390	338	100	Low international prices for bauxite probably led to a decline in exports in 1982. World demand for aluminum may increase slowly through 1984, limiting Guinea's export earnings.
1982 prel.	25	400	425	131	
1983 est.	25	420	400	133	
1984 est.	25	450	400	126	
Guinea-Bissau					
1979-82	14	12	55	NA	NA
1982 prel.	12	9	50	NA	
1983 est.	12	10	55	NA	
1984 est.	12	12	60	NA	
Liberia					
1979-82	19	538	425	55	Weak foreign markets for iron ore and rubber reduced total export earnings in 1982 while foreign-exchange constraints reduced imports. Trade balance likely will remain about the same until 1984. Debt-service payments could limit reserve growth in 1983 and 1984.
1982 prel.	10	494	321	75	
1983 est.	10	506	326	85	
1984 est.	15	538	332	88	
Mali					
1979-82	13	205	470	24	Poor harvests and low cotton prices reduced 1982 exports of agricultural products. Increased food import requirements and growth in debt-service payments will aggravate BOP problems.
1982 prel.	14	175	475	40	
1983 est.	10	182	500	46	
1984 est.	10	200	540	62	
Mauritania					
1979-82	137	203	340	54	Severe drought and sluggish demand for iron ore have raised food import needs and worsened BOP problems. External debt is likely to be rescheduled soon. Prospects for near-term improvement in BOP are not encouraging even though new long-term development projects are underway.
1982 prel.	131	200	367	65	
1983 est.	120	212	389	106	
1984 est.	120	227	414	79	

Continued--

Table 18.--West Africa financial indicators, actual and projected--continued

Country and year	International reserves (yearend)	Exports (f.o.b.)	Imports (f.o.b.)	Debt service due	1983 and 1984 conditions as of April 1983
		Million dollars			
Niger					
1979-82	103	232	688	55	Reversal of the uranium boom is creating severe economic and BOP problems. External debt quadrupled between 1980 and 1982 (to 300,000 million CFA), and debt servicing will consume almost a quarter of the 1983 budget.
1982 prel.	50	280	648	106	
1983 est.	40	300	698	89	
1984 est.	25	360	754	105	
Senegal					
1979-82	10	490	923	149	Recovery of peanut production in 1982 likely boosted export earnings. Large BOP deficit remains, but is eased by IMF-backed austerity budget and fiscal reform. Recovery is expected to be slow but steady.
1982 prel.	5	500	993	195	
1983 est.	5	550	1,051	185	
1984 est.	5	600	1,117	176	
Sierra Leone					
1979-82	26	176	319	37	Payments arrears have increased, worsening the current account deficit. Export prices for cocoa and coffee remain low and volume of diamond exports has fallen. Recent devaluations may ease foreign exchange constraints and reduce arrears.
1982 prel.	10	141	270	45	
1983 est.	15	141	270	35	
1984 est.	20	143	275	35	
Togo					
1979-82	113	263	413	57	Imports declined in 1982 because of devaluation of French franc. Export prices were lower, especially for cocoa and phosphates. Currency weakness will worsen the debt-service burden in the short term.
1982 prel.	157	183	423	91	
1983 est.	145	193	451	144	
1984 est.	145	203	484	129	
Upper Volta					
1979-82	63	108	284	NA	Increased imports of investment goods and deteriorating terms of trade caused the chronic trade deficit to worsen in 1982. Concessionary loans make debt servicing manageable, but debt-servicing ratio may worsen.
1982 prel.	50	87	306	NA	
1983 est.	45	88	325	NA	
1984 est.	45	93	346	NA	
West Africa, total					
1979-82	900	5,618	7,053	863	
1982 prel.	743	5,614	6,970	1,231	
1983 est.	720	6,023	7,453	1,336	
1984 est.	735	6,521	7,888	1,364	

NA = Not available.

Table 19.--West Africa import requirements and aid needs to support cereal stock adjustments 1/

Country	Estimated stock increment		Import requirements				Aid needs			
			Quantity		Value		Quantity		Value	
	Quantity	Value	Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based
	1,000 tons	Million dollars	1,000 tons		Million dollars		1,000 tons		Million dollars	
Guinea										
Cereals										
1983/84	19	6	216	468	72	156	106	357	35	119
1984/85	14	5	234	490	81	170	114	370	40	129
Total										
1983/84	--	6	--	--	72	156	--	--	35	119
1984/85	--	5	--	--	81	170	--	--	40	129
Guinea-Bissau										
Cereals										
1983/84	4	1	39	44	15	16	29	34	11	12
1984/85	2	1	39	43	15	17	28	32	11	12
Total										
1983/84	--	1	--	--	15	16	--	--	11	12
1984/85	--	1	--	--	15	17	--	--	11	12
Liberia										
Cereals										
1983/84	9	4	146	119	58	47	71	44	28	17
1984/85	7	3	162	132	66	54	84	54	34	22
Total										
1983/84	--	4	--	--	58	47	--	--	28	17
1984/85	--	3	--	--	66	54	--	--	34	22
Mauritania										
Cereals										
1983/84	-1	2/	161	207	29	37	116	162	21	29
1984/85	2/	2/	164	211	31	39	100	147	19	28
Total										
1983/84	--	2/	--	--	29	37	--	--	21	29
1984/85	--	2/	--	--	31	39	--	--	19	28
Senegal										
Cereals										
1983/84	27	6	394	503	88	112	0	94	0	21
1984/85	19	4	362	481	84	112	0	25	0	6
Total										
1983/84	--	6	--	--	88	112	--	--	0	21
1984/85	--	4	--	--	84	112	--	--	0	6
West Africa, total										
Cereals										
1983/84	58	17	2,100	3,724	664	1,455	930	2,554	349	1,139
1984/85	43	13	2,052	3,745	685	1,541	792	2,485	335	1,190
Total										
1983/84	--	17	--	--	664	1,455	--	--	348	1,139
1984/85	--	13	--	--	685	1,541	--	--	333	1,189

1/ Includes only countries for which cereal stock data are available.
2/ Less than 1.
-- Not applicable.

CENTRAL AFRICA SUBREGION

In recent years, overall food production in the Central African countries has not increased as fast as population. However, in Equatorial Guinea production of cassava and plantains has supplied adequate caloric diets, while corn and cassava output in the Congo finally registered increases in 1982/83 after a long decline. In Zaire, output of cassava, corn, and rice increased sufficiently in 1982/83 to maintain the preceding year's level of per capita food production. The drought-related decline in corn available for import from southern Africa has created a food shortage in southeastern Zaire, and total cereal import requirements for Zaire will consequently stay at last year's level. Food production in Angola continues to be far below dietary needs. Cereal imports financed by petroleum exports, far from raising dietary standards, have at times only prevented starvation in the urban areas.

Angola

Information on food and agriculture in Angola remains sketchy. Except for data on the key cash crop--coffee--few hard statistics are available. Continued warfare within the country, mainly in the central area and the south, has severely disrupted agriculture and the economy. Many of the principal grain-growing areas are not under Government control, and the marketing system for transporting grain from these areas has been weakened by damage to infrastructure. The population of Luanda, the capital and the largest city, has grown significantly since independence, increasing food needs. These must be largely supplied by imports.

Despite these problems, weather has apparently been normal in most of the country during 1982/83. If favorable weather returns during 1983/84, gains are expected in production of both cereals and roots and tubers. Per capita production for these food items, on a cereal-equivalent basis, could exceed 1982/83 levels by 5 percent. But even these gains will not reverse a growing trend toward dependence upon food imports to supply urban areas such as Luanda. In 1982/83 imports comprised over half of total cereal use in Angola. As a result, grain import needs for 1983/84 are likely to exceed 300,000 tons.

Until recently, because of its petroleum revenues, Angola had been one of the few African countries with enough money to finance food imports--despite heavy defense expenditures. However, Angola's ability to import is currently limited by declining export revenues for petroleum and other important items such as diamonds and coffee. In the absence of economic growth, food aid will become increasingly important. By either measure--maintaining current intake levels or establishing nutritionally adequate diets--Angola's 1983/84 food aid needs are expected to exceed 60,000 tons.

Central African Republic

Production of cassava and yams, the main food crops, increased in 1982/83, and these gains are expected to be sustained into 1983/84. However, cereal imports--chiefly wheat--will remain

essential to providing bread for the urban population. The caloric needs of the rural population are largely met by root crops.

The trade deficit, already large in the late 1970's, is expected to increase this year and next. In 1983/84, the trade deficit taken together with debt service will be almost twice as large as currency reserves. Nearly all cereal import requirements will have to be purchased on a concessional basis in 1983/84.

Congo

The Congo seems to have reversed its long decline in corn and cassava production. Cassava output increased by 8 percent in 1982/83. Furthermore, a higher percentage of the output was marketed, alleviating shortages that existed in the cities and lowering the retail price of cassava flour. Production of corn and rice on the State farms also increased substantially, as did the output of coffee, cocoa, and palm oil.

Even with these improvements in domestic production, wheat should be imported in significant amounts for the 40 percent of the population living in the cities. As a result, to maintain current intake levels, cereal import requirements will remain about the same as 1982/83 purchases. And earnings from marketing petroleum production of more than 4 million tons annually, coupled with a relatively small population of only 1.6 million, allow the Congo to import the bulk of its food commercially. Estimated per capita food aid needs in 1983/84 will be relatively low.

Equatorial Guinea

Dietary needs are supplied almost entirely by root crops, which should be adequate to cover intake requirements again in 1983/84. Limited cereal requirements are supplied by food donations each year, including 1,000 to 2,000 tons of EC wheat and small amounts of rice and coarse grain.

Zaire

Production of cassava, corn, and rice increased in 1982/83, stimulated by higher producer prices. The expanded role of the private sector in production and marketing should increase marketed food supplies in 1983 and 1984. Per capita grain production in 1983/84 is expected to be nearly 2 percent above the 1979-82 base period. The one dim spot in this outlook is corn; prospects for the April-November 1983 harvesting season are not good. Heavy rains provided ample moisture for the crops but also washed out many fields. The distribution of corn--as well as of the other important food crop, cassava--may also be constrained by the poor condition of roads.

Despite the generally good prospects for food supplies next year, a food gap may still develop in large urban areas such as Kinshasa, because of a shortage of foreign exchange to pay for wheat and diesel fuel imports. In 1982/83, wheat imports of 145,000 tons were an estimated 50,000 tons short of filling the demand in Kinshasa, and fuel shortages hampered transportation of domestically grown food, such as cassava, that could have substituted for the wheat. In Lubumbashi, a major city in the

south, an acute shortage of corn flour caused malnutrition and hunger during February and March of this year--the period between harvests when corn imports are needed to supplement food supplies. Early in 1983, corn imports from traditional suppliers such as Zambia, Zimbabwe, and South Africa dwindled to zero because of the drought in southern Africa. This left a shortfall of 90,000 tons of corn flour, adding to an already troublesome deficit which began in 1981, when corn imports were cut because of lack of foreign exchange.

Low export prices for copper, cobalt, and diamonds prevent Zaire from generating sufficient foreign exchange to service its $5 billion external debt. Zaire will therefore need concessional assistance to import up to 50,000 tons of cereals just to maintain current intake levels.

The rural populations' diets--which consist primarily of cassava, plantains, sweet potatoes, and corn--will likely be close to the 2,317-calorie recommended base. But the Kinshasa and Lubumbashi populations, whose purchasing power is being drastically cut by inflation, are not likely to purchase enough food to meet recommended caloric levels. Nutrition-based import requirements in 1983/84 are expected to reach more than 1.2 million tons--among the largest in Africa.

Table 20.--Central Africa basic food data

Country/commodity	Actual or forecast production	Actual or targeted beginning stocks	Net imports	Use: Nonfeed use	Use: Feed use	Use: Total use	Actual or targeted ending stocks	Actual or forecast population	Per capita nonfeed use	Commodities covered and share of daily per capita caloric intake: Commodity	Percent
	1,000 tons							Thousands	Kilos		
Angola											
Major cereals										Wheat	7.0
1979/80-1982/83	334	0	331	665	0	665	0	6,690	99	Rice	3.1
1982/83 prel.	317	0	385	702	0	702	0	6,841	103	Corn	23.3
1983/84 est.	370	0	--	--	0	--	0	6,957	--	Cassava	29.9
1984/85 est.	423	0	--	--	0	--	0	7,131	--	Total	63.4
Roots and tubers											
1979/80-1982/83	1,850	0	0	1,850	0	1,850	0	6,690	277		
1982/83 prel.	1,900	0	0	1,900	0	1,900	0	6,841	278		
1983/84 est.	1,950	0	--	--	0	--	0	6,957	--		
1984/85 est.	2,000	0	--	--	0	--	0	7,131	--		
Cent. Afr. Rep.											
Major cereals										Wheat	3.0
1979/80-1982/83	37	0	23	60	0	60	0	2,384	25	Corn	5.4
1982/83 prel.	40	0	32	72	0	72	0	2,488	29	Cassava	40.7
1983/84 est.	42	0	--	--	0	--	0	2,563	--	Millet	7.0
1984/85 est.	44	0	--	--	0	--	0	2,640	--	Yams and cocoyams	10.2
										Total	66.3
Roots and tubers											
1979/80-1982/83	1,242	0	0	1,242	0	1,242	0	2,384	521		
1982/83 prel.	1,280	0	0	1,280	0	1,280	0	2,488	514		
1983/84 est.	1,315	0	--	--	0	--	0	2,563	--		
1984/85 est.	1,315	0	--	--	0	--	0	2,640	--		
Congo											
Major cereals										Wheat	9.2
1979/80-1982/83	16	0	74	90	0	90	0	1,574	57	Corn	4.4
1982/83 prel.	17	0	75	92	0	92	0	1,642	56	Cassava	50.7
1983/84 est.	18	0	--	--	0	--	0	1,690	--	Total	64.3
1984/85 est.	19	0	--	--	0	--	0	1,725	--		
Roots and tubers											
1979/80-1982/83	554	0	0	554	0	554	0	1,574	352		
1982/83 prel.	575	0	0	575	0	575	0	1,642	350		
1983/84 est.	590	0	--	--	0	--	0	1,690	--		
1984/85 est.	625	0	--	--	0	--	0	1,725	--		
Eq. Guinea											
Major cereals											
1979/80-1982/83	0	0	3	3	0	3	0	372	8		
1982/83 prel.	0	0	2	2	0	2	0	363	6		
1983/84 est.	0	0	--	--	0	--	0	381	--		
1984/85 est.	0	0	--	--	0	--	0	390	--		
Roots and tubers											
1979/80-1982/83	82	0	0	82	0	82	0	372	234		
1982/83 prel.	85	0	0	85	0	85	0	363	234		
1983/84 est.	86	0	--	--	0	--	0	381	--		
1984/85 est.	90	0	--	--	0	--	0	390	--		
Zaire											
Major cereals										Rice	2.8
1979/80-1982/83	710	41	199	905	0	905	45	29,951	30	Corn	9.2
1982/83 prel.	768	45	180	948	0	948	45	31,506	30	Cassava	55.5
1983/84 est.	800	45	--	--	0	--	45	32,031	--	Millet and sorghum	.6
1984/85 est.	810	45	--	--	0	--	45	32,928	--	Total	68.1
Roots and tubers											
1979/80-1982/83	12,303	0	0	12,303	0	12,303	0	29,951	411		
1982/83 prel.	12,609	0	0	12,609	0	12,609	0	31,506	400		
1983/84 est.	12,818	0	--	--	0	--	0	32,031	--		
1984/85 est.	13,015	0	--	--	0	--	0	32,928	--		

Continued--

Table 20.--Central Africa basic food data--continued

Country/commodity	Actual or forecast production	Actual or targeted beginning stocks	Net imports	Use: Nonfeed use	Use: Feed use	Use: Total use	Actual or targeted ending stocks	Actual or forecast population	Per capita nonfeed use	Commodities covered and share of daily per capita caloric intake: Commodity	Commodities covered and share of daily per capita caloric intake: Percent
	1,000 tons							Thousands	Kilos		
Central Africa, total											
Major cereals											
1979/80-1982/83	1,097	41	629	1,722	0	1,722	45				
1982/83 prel.	1,142	45	674	1,816	0	1,816	45				
1983/84 est.	1,230	45	--	--	0	--	45				
1984/85 est.	1,296	45	--	--	0	--	45				
Roots and tubers											
1979/80-1982/83	16,032	0	0	16,032	0	16,032	0				
1982/83 prel.	16,449	0	0	16,449	0	16,449	0				
1983/84 est.	16,759	0	--	--	0	--	0				
1984/85 est.	17,045	0	--	--	0	--	0				

--Not applicable.

Table 21.--Central Africa food requirements, import requirements, and food aid needs to support consumption, status quo- and nutrition-based estimates

Country/ commodity	Forecast domestic production	Total use 1/		Import requirements				Commercial import capacity		Food aid needs			
				Quantity		Value				Quantity		Value	
		Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based			Status quo	Nutrit. based	Status quo	Nutrit. based
		1,000 tons				Million dollars		1,000 tons	Million dollars	1,000 tons		Million dollars	
Angola													
Major cereals													
1983/84	370	691	681	321	311	--	--	--	--	--	--	--	--
1984/85	423	708	705	285	282	--	--	--	--	--	--	--	--
Roots and tubers													
1983/84	1,950	1,924	1,925	-26	-25	--	--	--	--	--	--	--	--
1984/85	2,000	1,972	1,974	-28	-26	--	--	--	--	--	--	--	--
Total 2/													
1983/84	--	--	--	311	302	59	57	240	45	71	62	13	12
1984/85	--	--	--	274	272	54	54	230	45	45	42	9	8
Cent. Afr. Rep.													
Major cereals													
1983/84	42	64	116	22	74	--	--	--	--	--	--	--	--
1984/85	44	66	120	22	76	--	--	--	--	--	--	--	--
Roots and tubers													
1983/84	1,315	1,336	1,392	21	77	--	--	--	--	--	--	--	--
1984/85	1,315	1,376	1,425	61	110	--	--	--	--	--	--	--	--
Total 2/													
1983/84	--	--	--	30	103	10	35	4	1	26	99	9	34
1984/85	--	--	--	45	118	16	42	4	1	41	114	15	41
Congo													
Major cereals													
1983/84	18	97	68	79	50	--	--	--	--	--	--	--	--
1984/85	19	99	70	80	51	--	--	--	--	--	--	--	--
Roots and tubers													
1983/84	590	595	673	5	83	--	--	--	--	--	--	--	--
1984/85	625	607	687	-18	62	--	--	--	--	--	--	--	--
Total 2/													
1983/84	--	--	--	81	83	20	21	65	16	16	18	4	5
1984/85	--	--	--	73	75	19	19	77	20	0	0	0	0
Eq. Guinea													
Major cereals													
1983/84	0	3	0	3	--	--	--	--	--	--	--	--	--
1984/85	0	3	0	3	--	--	--	--	--	--	--	--	--
Roots and tubers													
1983/84	86	89	86	3	--	--	--	--	--	--	--	--	--
1984/85	90	91	90	1	--	--	--	--	--	--	--	--	--
Total 2/													
1983/84	--	--	--	4	NA	2	NA	1	3/	3	NA	1	NA
1984/85	--	--	--	4	NA	1	NA	1	3/	2	NA	1	NA
Zaire													
Major cereals													
1983/84	800	967	1,379	167	579	--	--	--	--	--	--	--	--
1984/85	810	994	1,412	184	602	--	--	--	--	--	--	--	--
Roots and tubers													
1983/84	12,818	13,165	14,676	347	1,858	--	--	--	--	--	--	--	--
1984/85	13,015	13,533	15,074	518	2,059	--	--	--	--	--	--	--	--
Total 2/													
1983/84	--	--	--	288	1,227	70	296	237	57	51	990	12	239
1984/85	--	--	--	365	1,321	92	332	284	72	81	1036	20	261
Central Africa, tot.													
Total, major cereals and roots/tubers 2/													
1983/84	--	--	--	714	1,715	160	409	--	--	167	1169	40	289
1984/85	--	--	--	761	1,786	182	448	--	--	169	1192	45	310
Total													
1983/84	--	--	--	--	--	160	409	--	--	--	--	40	289
1984/85	--	--	--	--	--	182	448	--	--	--	--	45	310

1/ The sum of targeted nonfeed and feed use. 2/ Cereal equivalent. 3/ Less than 1. -- Not applicable. NA = Not available.

Table 22.--Summary of Central Africa cereal import requirements and food aid needs to support consumption, status quo- and nutrition-based estimates

Country	1982/83 imports	1983/84 import requirements: Status quo	1983/84 import requirements: Nutrit. based	1983/84 aid needs: Status quo	1983/84 aid needs: Nutrit. based
	1,000 tons				
Angola	385	311	302	71	62
Cent. Afr. Rep.	32	30	103	26	99
Congo	75	81	83	16	18
Eq. Guinea	2	4	NA	3	NA
Zaire	180	288	1,227	51	990
Central Africa, total	675	714	1,715	167	1,169

NA = Not available.

Table 23.--Central Africa financial indicators, actual and projected

Country and year	International reserves, yearend	Exports (f.o.b.)	Imports (f.o.b.)	Debt service due	1983 and 1984 conditions as of May 1983
	Million dollars				
Angola					
1979-82	NA	NA	NA	NA	Lower oil prices depressed export revenues in 1982. Armed conflicts persist over much of the country, draining the economy.
1982 prel.	NA	NA	NA	NA	
1983 est.	NA	NA	NA	NA	
1984 est.	NA	NA	NA	NA	
Cent. Afr. Rep.					
1979-82	57	106	156	7	Exports likely declined substantially in dollar terms in 1982 because of currency devaluations and weak markets for diamonds, cotton, and coffee. Foreign exchange constraints curtailed imports.
1982 prel.	60	89	161	20	
1983 est.	55	90	170	21	
1984 est.	55	94	181	21	
Congo					
1979-82	72	860	561	150	Weakened petroleum market probably reduced export earnings in 1982, and will likely restrain gains in the future. Imports likely stagnated owing to foreign exchange constraints.
1982 prel.	35	993	532	280	
1983 est.	50	1,026	568	336	
1984 est.	70	1,127	609	287	
Eq. Guinea					
1979-82	NA	18	36	NA	Despite increased exports of cocoa and timber, the current account deficit in 1982 equaled roughly one-half of GDP. Trade deficits and debt service payments are financed partly by Spain.
1982 prel.	NA	15	43	NA	
1983 est.	NA	16	46	NA	
1984 est.	NA	18	50	NA	
Zaire					
1979-82	171	1,717	1,351	358	With prices for copper, cobalt, and diamonds low, Zaire's high debt-service payments are difficult to manage. Imports declined again in 1982 while food production increased. Poor minerals and metals outlook leads to low export projections.
1982 prel.	122	1,500	1,300	731	
1983 est.	130	1,600	1,400	666	
1984 est.	130	1,800	1,500	633	
Central Africa, total					
1979-82	300	2,701	2,104	514	
1982 prel.	217	2,597	2,035	1,031	
1983 est.	235	2,732	2,184	1,023	
1984 est.	255	3,040	2,341	941	

NA = Not available.

Table 24.--Central Africa import requirements and aid needs to support cereal stock adjustments 1/

Country	Estimated stock increment		Import requirements				Aid needs			
			Quantity		Value		Quantity		Value	
	Quantity	Value	Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based
	1,000 tons	Million dollars	1,000 tons		Million dollars		1,000 tons		Million dollars	
Zaire										
Cereals										
1983/84	4	1	292	1,231	71	297	55	994	13	240
1984/85	3	1	368	1,323	93	333	84	1039	21	262
Total										
1983/84	--	1	--	--	71	297	--	--	13	240
1984/85	--	1	--	--	93	333	--	--	21	262

1/ Includes only countries for which cereal stock data are available.

-- Not applicable.

EAST AFRICA SUBREGION

Most of the 1982/83 harvests in East Africa were favorable. Kenya and Somalia registered gains of 8-9 percent in cereal production over 1981/82, while in Uganda and Tanzania the harvest improved from lows in the recent past. Because of a below-trend wheat crop, Sudan's cereal harvest was only somewhat above average. Ethiopia's grain production was lower than expected because of drought.

Despite favorable production in the region, most countries still required food aid to boost dwindling supplies. The region's major food aid recipients in 1982/83 were Tanzania, Somalia, Ethiopia, Kenya, and Sudan. Uganda and Djibouti also received an estimated smaller quantities. Because of the cumulative effects of chronic food production shortfalls, Tanzania received 355,000 tons of cereal food aid--90 percent of its total grain imports. Somalia received 290,000 tons in cereal aid to help feed refugees and stretch its scarce currency supplies.

With the possible exception of Uganda, all the countries will continue to rely on grain imports in 1983/84. Tanzania's aid needs will be high again, while Somalia's requirements may subside somewhat because of better harvests and an outflow of refugees. Ethiopia's food situation has become more critical because of localized drought, continued military conflicts, and food distribution bottlenecks.

Burundi

Burundi grows enough corn, sorghum, cassava, and sweet potatoes to satisfy the consumption needs of its people. Caloric intake is well above the FAO recommended minimum. Food production increased 20 percent over the decade ending in 1982, slightly less than the growth in population. With 235 people per square kilometer of arable land, any significant decline in Burundi's food crop production would necessitate grain imports. But historically cereal imports have been small relative to total consumption.

Burundi would have difficulty paying for massive food imports. Receipts from its main export, coffee, have covered only 35 percent of import expenditures since 1980. Further, about 30 percent of the record coffee production from 1981 and 1982 remains unsold because the exportable supplies exceeded Burundi's quota under an agreement reached by major coffee exporters. But food production in 1983/84 is expected to meet Burundi's consumption requirements.

Djibouti

Djibouti's population is concentrated in Djibouti City, limiting considerably the potential for agricultural production. Cereal output is negligible, and fruits and vegetables are cultivated on only about 50 hectares. Some livestock is raised by nomads. All of the country's grain supplies are imported. Grain imports in 1982/83 provided about 123 kilograms of cereal per person, up 32 percent from the year before. Larger rice availabilities made up most of the difference, counterbalancing a decline in wheat supplies. Even

though growing imports increase overall food supplies in Djibouti, imbalances in food distribution prevent the entire population from receiving adequate diets. Families benefiting from the shipping and trade industries, including the expatriates, enjoy ample diets. But for many low-income urban families, as well as refugees and nomads, per capita intake is inadequate. On the other hand, some refugees live in camps where, because of emergency feeding programs, per capita food supplies have exceeded amounts available to the rest of the population.

Because of port service activities and transfer receipts, Djibouti has been able to generate growing export revenues and a comfortable supply of currency reserves. Real GDP has registered growth of 3 percent annually in recent years. Yet unemployment, a chronic problem facing the low-income population, has been rising. Though no food aid needs are estimated for Djibouti overall in 1983/84, some assistance may be needed for localized problems and inequities.

Ethiopia

With per capita income estimated at about $140, Ethiopia is one of the world's poorest countries. In addition, a long-term war of attrition with Somalia has harmed Ethiopia's agriculture as well as its general economy. In 1982/83, late summer rains, followed by drought in some areas, resulted in the cereal harvests being disappointing for the second consecutive year. Sorghum output was below 1981/82, while the teff, corn, wheat, and millet crops were only marginally higher than a year earlier. Total grain production reached 4.02 million tons, comprised mainly of corn--a staple food in rural areas--and teff, the primary bread grain. If rainfall is closer to trend, next year's cereal harvest should be slightly higher, although military disturbances could affect plantings in several areas, particularly Eritrea.

Because of a foreign exchange shortage, grain imports in 1982/83 were also low, given overall needs. Wheat imports, though, amounted to an estimated 265,000 tons, 6 percent above the previous year. Because of the poor harvests and smaller imports, as well as population growth, food supplies were inadequate during 1982/83. Lack of infrastructure for food distribution, and some diversion of food aid to the army, also curtailed supplies in areas where they were most needed. Residents of the northern highlands and the southwest were reported to be suffering from famine. Teff shortages in Addis Ababa were also severe. Nor did the perennial problem of feeding refugees abate, as thousands of Ethiopians migrated from one part of the country to another because of either fighting or food shortages.

Based on recent consumption levels, cereal import requirements for 1983/84 would be 532,000 tons. However, Ethiopia's current caloric intake supplies one of the least adequate diets in the world; Ethiopians receive only 78 percent of recommended minimum calories. Consequently, to reach the FAO minimum, grain imports would have to balloon to 2.35 million tons in 1983/84. Ethiopia does not have the currency to handle the

purchases under either assumption, nor is it likely to receive these amounts in food aid commitments. For political reasons, the country has been ineligible for P.L. 480 Title I, although food aid for humanitarian purposes under Title II has been given in recent years.

Kenya

Kenya is one of the few southern and eastern African countries that did not experience poor crop conditions or unusual food shortages during 1982/83. Kenya has enjoyed favorable weather, bringing two consecutive good grain harvests. Also partly responsible were producer prices for corn, which have more than doubled from the low level of 1979. However, the Maize Board is having difficulty in storing and making payments on the 1982/83 harvest. Delays in payments to farmers this year could hurt 1983 plantings and the 1983/84 corn harvest. In early 1983, Kenya sold surplus corn to the World Food Program.

Given an average 1983/84 corn crop, domestic corn should supply about 93 percent of total status quo use requirements. Corn and rice import needs, coupled with grain equivalent requirements for cassava and potatoes, total 318,000 tons for 1983/84. To meet nutritional norms, requirements would be over three times as large. Furthermore, because of rampant population growth, import requirements can be expected to stay this high or perhaps go higher, even with additional favorable harvests. Between 1980 and 2000, Kenya's population is expected to grow 4.1 percent annually, after Zimbabwe the highest rate in the world.

Kenya is expected to be able to finance only one-third of the imports needed to sustain base period intake levels in 1983/84. Kenya's terms of trade have deteriorated since 1977--a boom year for coffee exports. The merchandise trade deficit has swelled to over $1.3 billion, one of the highest per capita levels in the developing world. Coffee prices were firmer in early 1983 but the volume of coffee exports may be down from last year. Consequently, Kenya's foreign reserves may drop again in 1983 and remain low through 1984.

Rwanda

Drought during March, April, and May of 1982 caused food production to level off in 1982/83 after 4 consecutive years of gains that increased output by a total of 16 percent. But despite population increases, per capita food supplies retreated only marginally from 1981/82 levels. Rwanda's distance from the sea makes grain imports so expensive that self-sufficiency in cereal production is imperative. This explains why over 90 percent of Rwanda's labor force is engaged in agriculture. The roughly 20,000 tons of wheat and rice that Rwanda has to import annually comprise less than 2 percent of annual cereal and root and tuber use, on a cereal-equivalent basis.

Though Rwanda's diet is composed largely of starchy foods such as plantains, sweet potatoes, and cassava, which have fewer calories by weight than cereals, caloric intake per capita comes remarkably close to the FAO recommended minimum.

Assuming normal weather, next year's food production should keep up with the more than 3 percent population increase forecast for 1983/84. But this will depend in large measure upon obtaining better yields. In the past, increased food production has resulted from expanding planted area, but Rwanda is reaching the limit of expansion of arable croplands. Between 1974 and 1977, croplands expanded 5.5 percent; between 1977 and 1981, that growth slowed to just over 2.0 percent.

International agencies are currently feeding 50,000 Ugandan refugees who are camped in northeast Rwanda. But in the future Rwanda may have to provide permanent homes for many of these people, who are unlikely to return wholesale to Uganda. This could place extraordinary pressure upon food supplies that have up to now satisfied demand.

Coffee provides about 70 percent of Rwanda's foreign exchange earnings. A smaller coffee crop in 1982, coupled with low international prices for the coffee that was produced, contributed to a larger balance-of-payments deficit in 1982/83 than was in evidence during the late 1970's. Consequently, commercial import capacity is calculated to be negligible, and indicated aid needs are therefore equivalent to import requirements. However, calculations for Rwanda's commercial import capacity take into account only changes in currency reserves and overlook Rwanda's extensive foreign exchange supply. Even allowing for an adequate supply of reserves relative to imports, Rwanda could afford to purchase all of its modest cereal import requirements on a commercial basis.

Somalia

Somalia's grain harvests from both the main and secondary crop seasons were above average in 1982/83, with output nearly 9 percent above the levels of 1981/82. Excellent rainfall and increases in official producer prices explain the higher production of sorghum and corn, the major cereals. However, domestic production was once again inadequate to meet the needs of the nearly 4.8 million residents and refugees in Somalia. Cereal imports of about 295,000 tons--more than total domestic grain production--were needed to maintain per capita grain availabilities at 130-140 kilograms. Gains were made in per capita wheat availabilities only because large food aid receipts comprised a major portion of these imports. Corn and rice supplies also expanded. But per capita supplies of milk, an important element in the diet, declined about 6 percent from 1981/82 because of population growth and marginally lower output.

Of the 295,000 tons of grain imported in 1982/83--slightly lower than the previous year because of carryover stocks--wheat and flour imports accounted for the largest share, 180,000 tons in wheat equivalent. Rice accounted for 80,000 tons and corn for 25,000. Based on status quo needs, 1983/84 import requirements are forecast at 355,000 tons. An additional 64,000 tons of milk would be needed as well to supplement the cereal component of the Somali diet. But to meet the FAO minimum, an additional 434,000 tons of milk would have to be

imported. Most of Somalia's recent milk imports have been dry milk contributed by the United States under P.L. 480 Title II. But these amounts have been small relative to Somalia's needs. Considering recent donor commitments and the country's foreign exchange shortage, it is unlikely that the Government will be able to acquire even the status quo import needs for milk in 1983/84.

Somalia's merchandise trade deficit declined last year relative to 1981, as livestock exports to the Middle East expanded. But an outflow of private remittances increased the 1982 capital account deficit and the balance-of-payments deficit, estimated at $37 million. Somalia's debt-service obligations in 1983 are forecast to equal 57 percent of export earnings, and currency reserves are almost depleted.

Sudan

Adversely affected by late and inadequate rainfall during the summer sowing period, the 1982/83 cereal harvest measured an estimated 3.23 million tons, down from the record 4.02 million in 1981/82 but slightly above the recent average. Declines in output of the major cereals--sorghum and millet--erased slight gains in output of the minor crops--wheat and corn. Production of peanuts was down 30 percent from the high of 1981/82.

The poor harvests forced greater dependence on cereal imports than at any time in the past. Sudan's cereal imports in 1982/83 included a record 480,000 tons of wheat and flour in wheat equivalent, and 12,000 tons of rice. About 200,000 tons of sorghum were exported to Saudi Arabia, down slightly from exports in the 3 preceding years, because Saudi Arabia discontinued a lucrative subsidy previously paid to Sudanese sorghum exporters. Despite large imports, per capita food grain supplies fell 15 percent to 162 kilograms in 1982/83. Sorghum continued as the prominent cereal in the diet, followed by wheat and millet. Gradual increases in per capita wheat consumption are occurring each year in the Sudan because of large imports and urban bread subsidies.

Sudan's financial situation ranks among the worst in the world. The merchandise trade deficit, already nearing $600 million in 1982, is expected to swell over 18 percent during 1983. In recent years, internal debt has skyrocketed; annual debt-service obligations now exceed export earnings. Currency reserves have sunk to record lows. By the end of 1983, Sudan is forecast to have only enough reserves to pay for 1 week's imports. As a result, Sudan will need concessional assistance to import all of the 224,000 tons of cereal required in 1983/84 to uphold recent per capita consumption. Over double this amount of food aid would be needed to improve Sudanese diets to FAO minimum levels.

Tanzania

Weather in Tanzania was generally satisfactory during 1982 and into early 1983. But, even though food production increased marginally, population growth and low official marketings forced Tanzania to depend once again upon large cereal imports during 1982/83. Tanzania's strategic grain reserve was

depleted, and corn and wheat shortages became particularly severe. A major cause of reserve depletion was a grain borer which became established in west and central Tanzania, attacking stored grain and inflicting losses of up to 34 percent in some areas.

Tanzania's weakened economy has hurt food production. Fuel shortages restrict the movement of fertilizers and food. A large percentage of farm tractors is inoperative for lack of spare parts, reducing planted area considerably. Moreover, widespread distribution bottlenecks undercut the effectiveness of higher producer prices in increasing production. Cereal shortfalls have become chronic in spite of efforts to shift emphasis to food crops and away from export crop production.

Tanzania's import demand for capital goods and food has consistently outrun its ability to generate earnings from major export items such as coffee. In 1983, imports are forecast to be more than twice export earnings. This, coupled with nearly depleted reserves, is likely to increase Tanzania's already burdensome external debt. Foreign exchange reserves are a particularly acute problem. By the end of 1983, Tanzania is expected to have enough reserves left to cover 1-1/2 days' worth of imports--the lowest of the countries covered in this report. Consequently, Tanzania will need concessional assistance for 394,000 tons, or nearly 90 percent of its status quo cereal import requirements. And nearly double that amount would be needed to furnish enough calories per person to meet the FAO caloric minimum.

Uganda

Food and agricultural production was satisfactory in Uganda during 1982/83 because of normal crop conditions and favorable weather. Cereal output was off only fractionally, while significant gains were obtained in pulses and in roots and tubers--the most important components of the Ugandan diet. While political unrest continues, security has generally been satisfactory. In addition, a host of incentives, including higher producer prices, have been put in place recently, and marketings of most crops have increased substantially. However, distribution of food aid was necessary to relieve acute food shortages in Karamoja and west Nile. During the first 6 months of 1983, emergency food aid was also provided for 30,000 displaced persons in southwest Uganda, near Rwanda.

Domestic corn supplies have apparently improved enough that cereal imports will not be required in 1983/84 to maintain current intake levels. Restrictions on food exports were lifted during 1982, allowing shipments of cornmeal to northwest Tanzania. Despite hope for increased coffee export volume and slightly firmer world coffee prices, Uganda's total exports during 1983 are expected only to keep pace with those of 1982. Continued dependence on agricultural exports for income has stymied economic growth in Uganda in recent years. Seventy-six percent of Uganda's GDP consists of agricultural production--the highest concentration in the world. And, the value of agricultural production, in real terms, has dropped 10 percent since 1972.

Table 25.--East Africa basic food data

Country/commodity	Actual or forecast production	Actual or targeted beginning stocks	Net imports	Use: Nonfeed use	Use: Feed use	Use: Total use	Actual or targeted ending stocks	Actual or forecast population	Per capita nonfeed use	Commodities covered and share of daily per capita caloric intake: Commodity	Percent
	1,000 tons							Thousands	Kilos		
Burundi											
Major cereals										Wheat	1.1
1979/80-1982/83	333	0	17	350	0	350	0	4,357	80	Corn	20.5
1982/83 prel.	351	0	19	370	0	370	0	4,528	82	Cassava	13.3
1983/84 est.	361	0	--	--	0	--	0	4,468	--	Sorghum	9.4
1984/85 est.	355	0	--	--	0	--	0	4,619	--	Millet	.5
										Sweet potatoes	19.1
										Total	64.0
Roots and tubers											
1979/80-1982/83	1,908	0	0	1,908	0	1,908	0	4,357	438		
1982/83 prel.	2,000	0	0	2,000	0	2,000	0	4,528	442		
1983/84 est.	2,050	0	--	--	0	--	0	4,468	--		
1984/85 est.	2,085	0	--	--	0	--	0	4,619	--		
Djibouti 1/											
Major cereals											
1979/80-1982/83	0	2	34	34	0	34	2	313	108		
1982/83 prel.	0	0	40	40	0	40	0	326	123		
1983/84 est.	0	0	--	--	0	--	0	329	--		
1984/85 est.	0	0	--	--	0	--	0	337	--		
Ethiopia											
Major cereals										Wheat	10.6
1979/80-1982/83	4,140	81	285	4,394	23	4,417	89	32,478	135	Corn	18.3
1982/83 prel.	4,023	105	270	4,313	25	4,338	60	33,312	129	Sorghum	12.3
1983/84 est.	4,105	60	--	--	24	--	60	34,078	--	Millet	3.3
1984/85 est.	4,145	60	--	--	24	--	60	34,862	--	Barley	8.5
										Teff	16.3
										Total	69.1
Kenya											
Corn										Wheat	4.5
1979/80-1982/83	1,950	219	254	2,141	26	2,168	255	16,750	128	Rice	.8
1982/83 prel.	2,400	445	0	2,465	35	2,500	345	17,748	139	Corn	44.7
1983/84 est.	2,200	345	--	--	29	--	345	18,407	--	Cassava	5.7
1984/85 est.	2,100	345	--	--	30	--	345	19,090	--	Sorghum	4.3
										Millet	2.5
										Sweet potatoes	1.8
										Potatoes	1.6
										Total	65.8
Other cereals											
1979/80-1982/83	546	36	114	642	7	649	48	16,750	38		
1982/83 prel.	592	75	140	725	10	735	72	17,748	41		
1983/84 est.	602	72	--	--	7	--	72	18,407	--		
1984/85 est.	584	72	--	--	8	--	72	19,090	--		
Roots and tubers											
1979/80-1982/83	1,343	0	0	1,343	0	1,343	0	16,750	80		
1982/83 prel.	1,375	0	0	1,375	0	1,375	0	17,748	77		
1983/84 est.	1,385	0	--	--	0	--	0	18,407	--		
1984/85 est.	1,390	0	--	--	0	--	0	19,090	--		
Rwanda											
Major cereals										Wheat	0.8
1979/80-1982/83	257	0	13	270	0	270	0	5,187	52	Corn	5.6
1982/83 prel.	265	0	12	277	0	277	0	5,451	51	Cassava	10.4
1983/84 est.	271	0	--	--	0	--	0	5,617	--	Sorghum	11.1
1984/85 est.	271	0	--	--	0	--	0	5,785	--	Sweet potatoes	15.4
										Plantains	26.5
										Total	69.8
Roots and tubers											
1979/80-1982/83	3,497	0	0	3,497	0	3,497	0	5,187	675		
1982/83 prel.	3,590	0	0	3,590	0	3,590	0	5,451	659		
1983/84 est.	3,670	0	--	--	0	--	0	5,617	--		
1984/85 est.	3,740	0	--	--	0	--	0	5,785	--		

Continued--

Table 25.--East Africa basic food data--continued

Country/commodity	Actual or forecast production	Actual or targeted beginning stocks	Net imports	Use: Nonfeed use	Use: Feed use	Use: Total use	Actual or targeted ending stocks	Actual or forecast population	Per capita nonfeed use	Commodities covered and share of daily per capita caloric intake: Commodity	Percent
	1,000 tons							Thousands	Kilos		
Somalia											
Major cereals										Wheat	3.9
1979/80-1982/83	272	28	316	577	11	587	6	4,490	128	Rice	3.0
1982/83 prel.	285	80	295	649	11	660	0	4,729	137	Corn	18.4
1983/84 est.	276	0	--	--	11	--	0	4,847	--	Sorghum	17.3
1984/85 est.	282	0	--	--	12	--	0	4,968	--	Milk	20.5
										Total	63.0
Milk											
1979/80-1982/83	700	0	9	709	0	709	0	4,490	159		
1982/83 prel.	712	0	6	718	0	718	0	4,729	152		
1983/84 est.	705	0	--	--	0	--	0	4,847	--		
1984/85 est.	710	0	--	--	0	--	0	4,968	--		
Sudan											
Sorghum										Wheat	9.1
1979/80-1982/83	2,373	45	-263	2,004	142	2,146	10	19,357	103	Rice	.2
1982/83 prel.	2,500	10	-200	2,150	150	2,300	10	20,542	105	Corn	1.0
1983/84 est.	2,600	10	--	--	156	--	10	21,261	--	Sorghum	35.3
1984/85 est.	2,700	10	--	--	161	--	10	22,005	--	Millet	8.9
										Peanut oil	6.9
										Total	61.5
Wheat											
1979/80-1982/83	184	40	385	579	0	579	30	19,357	30		
1982/83 prel.	169	10	480	649	0	649	10	20,542	32		
1983/84 est.	180	10	--	--	0	--	10	21,261	--		
1984/85 est.	185	10	--	--	0	--	10	22,005	--		
Other cereals											
1979/80-1982/83	510	39	11	476	43	519	42	19,357	24		
1982/83 prel.	561	47	12	528	47	575	45	20,542	26		
1983/84 est.	537	45	--	--	47	--	45	21,261	--		
1984/85 est.	522	45	--	--	49	--	45	22,005	--		
Vegetable oils											
1979/80-1982/83	633	10	-61	572	0	572	10	19,357	30		
1982/83 prel.	612	10	-70	542	0	542	10	20,542	26		
1983/84 est.	650	10	--	--	0	--	10	21,261	--		
1984/85 est.	700	10	--	--	0	--	10	22,005	--		
Tanzania											
Corn										Wheat	2.8
1979/80-1982/83	914	90	204	1,113	22	1,134	74	18,419	60	Rice	3.9
1982/83 prel.	1,000	70	265	1,232	23	1,255	80	19,868	62	Corn	24.6
1983/84 est.	1,100	80	--	--	24	--	80	20,524	--	Cassava	24.5
1984/85 est.	1,000	80	--	--	25	--	80	21,202	--	Sorghum	1.5
										Millet	2.3
										Total	59.5
Other cereals											
1979/80-1982/83	591	36	98	633	50	683	41	18,419	34		
1982/83 prel.	584	53	107	654	50	704	40	19,868	33		
1983/84 est.	597	40	--	--	56	--	40	20,524	--		
1984/85 est.	632	40	--	--	58	--	40	21,202	--		
Roots and tubers											
1979/80-1982/83	4,638	0	0	4,638	0	4,638	0	18,419	252		
1982/83 prel.	4,750	0	0	4,750	0	4,750	0	19,868	239		
1983/84 est.	4,800	0	--	--	0	--	0	20,524	--		
1984/85 est.	4,900	0	--	--	0	--	0	21,202	--		

Continued--

Table 25.--East Africa basic food data--continued

Country/commodity	Actual or forecast production	Actual or targeted beginning stocks	Net imports	Use: Nonfeed use	Use: Feed use	Use: Total use	Actual or targeted ending stocks	Actual or forecast population	Per capita nonfeed use	Commodities covered and share of daily per capita caloric intake: Commodity	Percent
	1,000 tons							Thousands	Kilos		
Uganda											
Major cereals										Corn	14.3
1979/80-1982/83	1,286	0	14	1,300	0	1,300	0	13,151	99	Cassava	8.1
1982/83 prel.	1,376	0	5	1,381	0	1,381	0	13,651	101	Sorghum	7.2
1983/84 est.	1,434	0	--	--	0	--	0	14,094	--	Millet	8.6
1984/85 est.	1,425	0	--	--	0	--	0	14,552	--	Sweet-potatoes	4.3
										Dry beans	6.5
										Potatoes	1.9
										Total	67.3
Roots and tubers											
1979/80-1982/83	6,193	0	0	6,193	0	6,193	0	13,151	471		
1982/83 prel.	6,415	0	0	6,415	0	6,415	0	13,651	470		
1983/84 est.	6,555	0	--	--	0	--	0	14,094	--		
1984/85 est.	6,720	0	--	--	0	--	0	14,552	--		
Pulses											
1979/80-1982/83	216	0	1	217	0	217	0	13,151	16		
1982/83 prel.	257	0	0	257	0	257	0	13,651	19		
1983/84 est.	257	0	--	--	0	--	0	14,094	--		
1984/85 est.	245	0	--	--	0	--	0	14,552	--		
East Africa, total											
Major cereals											
1979/80-1982/83	13,355	615	1,481	14,511	323	14,834	596	--	--		
1982/83 prel.	14,106	895	1,445	15,433	351	15,784	662	--	--		
1983/84 est.	14,263	662	--	--	354	--	662	--	--		
1984/85 est.	14,201	662	--	--	366	--	662	--	--		
Roots and tubers											
1979/80-1982/83	17,578	0	0	17,578	0	17,578	0	--	--		
1982/83 prel.	18,130	0	0	18,130	0	18,130	0	--	--		
1983/84 est.	18,460	0	--	--	0	--	0	--	--		
1984/85 est.	18,835	0	--	--	0	--	0	--	--		
Pulses											
1979/80-1982/83	216	0	1	217	0	217	0	--	--		
1982/83 prel.	257	0	0	257	0	257	0	--	--		
1983/84 est.	257	0	--	--	0	--	0	--	--		
1984/85 est.	245	0	--	--	0	--	0	--	--		
Vegetable oils											
1979/80-1982/83	633	10	-61	572	0	572	10	--	--		
1982/83 prel.	612	10	-70	542	0	542	10	--	--		
1983/84 est.	650	10	--	--	0	--	10	--	--		
1984/85 est.	700	10	--	--	0	--	10	--	--		
Milk											
1979/80-1982/83	700	0	9	709	0	709	0	--	--		
1982/83 prel.	712	0	6	718	0	718	0	--	--		
1983/84 est.	705	0	--	--	0	--	0	--	--		
1984/85 est.	710	0	--	--	0	--	0	--	--		

1/ Caloric data not available.
-- Not applicable.

Table 26.--East Africa food requirements, import requirements, and food aid needs to support consumption, status quo- and nutrition-based estimates

Country/ commodity	Forecast domestic production	Total use 1/		Import requirements				Commercial import capacity		Food aid needs			
				Quantity		Value				Quantity		Value	
		Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based			Status quo	Nutrit. based	Status quo	Nutrit. based
	1,000 tons					Million dollars		1,000 tons	Million dollars	1,000 tons		Million dollars	
Burundi													
Major cereals													
1983/84	361	358	414	-3	53	--	--	--	--	--	--	--	--
1984/85	355	370	426	15	71	--	--	--	--	--	--	--	--
Roots and tubers													
1983/84	2,050	1,956	1,893	-94	-157	--	--	--	--	--	--	--	--
1984/85	2,085	2,022	1,954	-63	-131	--	--	--	--	--	--	--	--
Total 2/													
1983/84	--	--	--	0	8	0	6	0	0	0	8	0	6
1984/85	--	--	--	1	36	1	27	0	0	1	36	1	27
Djibouti													
Major cereals													
1983/84	0	36	NA	36	NA	14	NA	41	16	0	NA	0	NA
1984/85	0	36	NA	36	NA	15	NA	39	16	0	NA	0	NA
Ethiopia													
Major cereals													
1983/84	4,105	4,637	6,459	532	2,354	73	322	82	11	450	2,272	62	310
1984/85	4,145	4,744	6,602	599	2,457	85	350	79	11	520	2,378	74	339
Kenya													
Corn													
1983/84	2,200	2,376	3,022	176	822	--	--	--	--	--	--	--	--
1984/85	2,100	2,464	3,091	364	991	--	--	--	--	--	--	--	--
Other cereals													
1983/84	602	710	770	108	168	--	--	--	--	--	--	--	--
1984/85	584	737	789	153	205	--	--	--	--	--	--	--	--
Roots and tubers													
1983/84	1,385	1,477	1,626	92	241	--	--	--	--	--	--	--	--
1984/85	1,390	1,532	1,679	142	289	--	--	--	--	--	--	--	--
Total 2/													
1983/84	--	--	--	318	1,080	90	306	103	29	215	977	61	276
1984/85	--	--	--	568	1,302	168	384	106	31	462	1,197	136	353
Rwanda													
Major cereals													
1983/84	271	293	301	22	30	--	--	--	--	--	--	--	--
1984/85	271	301	309	30	38	--	--	--	--	--	--	--	--
Roots and tubers													
1983/84	3,670	3,789	3,759	119	89	--	--	--	--	--	--	--	--
1984/85	3,740	3,902	3,862	162	122	--	--	--	--	--	--	--	--
Total 2/													
1983/84	--	--	--	58	55	89	85	0	0	58	55	89	85
1984/85	--	--	--	80	74	128	119	0	0	80	74	128	118
Somalia													
Major cereals													
1983/84	276	631	569	355	293	138	114	72	28	284	222	110	86
1984/85	282	647	583	365	301	148	122	75	30	290	227	118	92
Milk													
1983/84	705	769	1,139	64	434	66	447	5	5	59	428	60	441
1984/85	710	788	1,166	78	456	80	470	6	6	72	451	74	464
Total													
1983/84	--	--	--	--	--	204	560	--	33	--	--	171	527
1984/85	--	--	--	--	--	228	592	--	36	--	--	192	556

Continued--

Table 26.--East Africa food requirements, import requirements, and food aid needs to support consumption, status quo- and nutrition-based estimates--continued

Country/ commodity	Forecast domestic production	Total use 1/		Import requirements				Commercial import capacity		Food aid needs			
				Quantity		Value				Quantity		Value	
		Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based			Status quo	Nutrit. based	Status quo	Nutrit. based
	1,000 tons					Million dollars		1,000 tons	Million dollars	1,000 tons		Million dollars	
Sudan													
Sorghum													
1983/84	2,600	2,338	2,573	-262	-27	--	--	--	--	--	--	--	--
1984/85	2,700	2,420	2,664	-280	-36	--	--	--	--	--	--	--	--
Wheat													
1983/84	180	636	556	456	376	--	--	--	--	--	--	--	--
1984/85	185	658	576	473	391	--	--	--	--	--	--	--	--
Other cereals													
1983/84	537	567	689	30	152	--	--	--	--	--	--	--	--
1984/85	522	587	710	65	188	--	--	--	--	--	--	--	--
Total above 2/													
1983/84	--	--	--	224	501	39	88	0	0	224	501	39	88
1984/85	--	--	--	258	543	47	100	0	0	258	543	47	100
Vegetable oils													
1983/84	650	629	143	0	0	0	0	0	0	0	0	0	0
1984/85	700	651	148	0	0	0	0	0	0	0	0	0	0
Total													
1983/84	--	--	--	--	--	39	88	--	0	--	--	39	88
1984/85	--	--	--	--	--	47	100	--	0	--	--	47	100
Tanzania													
Corn													
1983/84	1,100	1,265	1,443	165	343	--	--	--	--	--	--	--	--
1984/85	1,000	1,307	1,477	307	477	--	--	--	--	--	--	--	--
Other cereals													
1983/84	597	762	842	165	245	--	--	--	--	--	--	--	--
1984/85	632	787	873	155	241	--	--	--	--	--	--	--	--
Roots and tubers													
1983/84	4,800	5,175	5,512	375	712	--	--	--	--	--	--	--	--
1984/85	4,900	5,346	5,685	446	785	--	--	--	--	--	--	--	--
Total 2/													
1983/84	--	--	--	450	816	227	412	57	29	394	759	199	383
1984/85	--	--	--	605	969	318	510	55	29	550	915	290	481
Uganda													
Major cereals													
1983/84	1,434	1,392	1,850	-42	416	--	--	--	--	--	--	--	--
1984/85	1,425	1,437	1,879	12	454	--	--	--	--	--	--	--	--
Roots and tubers													
1983/84	6,555	6,637	6,838	82	283	--	--	--	--	--	--	--	--
1984/85	6,720	6,852	7,040	132	320	--	--	--	--	--	--	--	--
Total above 2/													
1983/84	--	--	--	0	506	0	184	4	1	0	502	0	183
1984/85	--	--	--	56	556	21	211	5	2	50	551	19	209
Pulses													
1983/84	257	232	299	0	42	0	10	2	1	0	40	0	10
1984/85	245	239	303	0	58	0	18	2	1	0	56	0	18
Total													
1983/84	--	--	--	--	--	0	194	--	2	--	--	0	192
1984/85	--	--	--	--	--	21	229	--	2	--	--	19	227

Continued--

Table 26.--East Africa food requirements, import requirements, and food aid needs to support consumption, status quo- and nutrition-based estimates--continued

Country/ commodity	Forecast domestic production	Total use 1/		Import requirements				Commercial import capacity		Food aid needs			
				Quantity		Value				Quantity		Value	
		Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based			Status quo	Nutrit. based	Status quo	Nutrit. based
	---1,000 tons---					Million dollars		1,000 tons	Million dollars	1,000 tons		Million dollars	
East Africa, total													
Total, major cereals and roots & tubers													
1983/84	--	--	--	1,974	5,613	671	1,516	--	--	1,624	5,296	560	1,418
1984/85	--	--	--	2,568	6,238	932	1,822	--	--	2,211	5,919	814	1,720
Pulses													
1983/84	--	--	--	0	42	0	10	--	--	0	40	0	10
1984/85	--	--	--	0	58	0	18	--	--	0	56	0	18
Vegetable oils													
1983/84	--	--	--	0	0	0	0	--	--	0	0	0	0
1984/85	--	--	--	0	0	0	0	--	--	0	0	0	0
Milk													
1983/84	--	--	--	64	434	66	447	--	--	59	428	60	441
1984/85	--	--	--	78	456	80	470	--	--	72	451	74	464
Total													
1983/84	--	--	--	--	--	737	1,973	--	--	--	--	620	1,868
1984/85	--	--	--	--	--	1,013	2,311	--	--	--	--	888	2,201

1/ The sum of targeted nonfeed and feed use.
2/ Cereal equivalent.
-- Not applicable.

Table 27.--Summary of East Africa cereal import requirements and food aid needs to support consumption, status quo and nutrition-based estimates

Country	1982/83 imports	1983/84 import requirements		1983/84 aid needs	
		Status quo	Nutrit. based	Status quo	Nutrit. based
	---1,000 tons---				
Burundi	19	0	8	0	8
Djibouti	40	36	--	0	--
Ethiopia	270	532	2,354	450	2,272
Kenya	140	318	1,080	215	977
Rwanda	12	58	55	58	55
Somalia	295	355	293	284	222
Sudan	292	224	501	224	501
Tanzania	372	450	816	394	759
Uganda	5	0	506	0	502
East Africa, total	1,445	1,974	5,613	1,624	5,296

-- Not applicable.

Table 28.--East Africa financial indicators, actual and projected

Country and year	International reserves, yearend	Exports (f.o.b.)	Imports (f.o.b.)	Debt service due	1983 and 1984 conditions as of April 1983
		Million dollars			
Burundi					
1979-82	70	73	139	5	Low coffee prices reduced total export earnings in 1982. Roughly 85 percent of export earnings come from coffee receipts. Reserves are likely to decline because of worsening of trade balance and increasing debt-service payments.
1982 prel.	35	52	131	9	
1983 est.	25	52	140	10	
1984 est.	25	55	150	12	
Djibouti					
1979-82	70	49	124	5	Chronic trade deficits are financed by external assistance and receipts from services. Major imports are food, machinery, and transportation equipment.
1982 prel.	80	75	140	1	
1983 est.	75	80	145	2	
1984 est.	75	85	155	2	
Ethiopia					
1979-82	187	379	663	29	The trade deficit increased in 1982 well above the average for the base period, as depressed coffee prices reduced exports while imports increased. Rapidly increasing debt service and slowly increasing exports will likely reduce reserves.
1982 prel.	230	294	850	9	
1983 est.	200	296	931	78	
1984 est.	200	312	984	78	
Kenya					
1979-82	382	1,093	2,065	244	Exports probably increased in 1982 despite low world prices for coffee and tea and disarray in world petroleum markets. Increasing imports may worsen the trade deficit through 1984
1982 prel.	176	1,074	2,320	325	
1983 est.	170	1,097	2,412	319	
1984 est.	170	1,161	2,518	328	
Rwanda					
1979-82	162	136	187	3	Exports declined in 1982 because of low revenue from coffee, tea, and cassiterite. Imports of petroleum and manufactured goods increased and faster import growth by 1984 will likely result in higher trade deficits and lower international reserves.
1982 prel.	137	92	190	4	
1983 est.	130	93	203	6	
1984 est.	130	96	219	7	
Somalia					
1979-82	24	209	485	23	Reduced banana and livestock prices probably led to declining exports in 1982. Imports, led by capital goods and equipment, likely increased in 1982 after declining in 1981. A leveling-off of foreign aid, because of a fall in the number of refugees, and higher debt-service payments will further aggravate BOP problems.
1982 prel.	7	237	501	65	
1983 est.	5	252	549	87	
1984 est.	5	268	603	87	
Sudan					
1979-82	40	642	1,167	239	Imports of wheat and petroleum contributed to larger-than-average trade imbalance. Low prices for cotton and groundnuts reduced exports in 1982, and continuing low prices will likely limit export growth. Accelerating debt-service payments could aggravate BOP difficulties.
1982 prel.	26	568	1,162	685	
1983 est.	20	569	1,272	767	
1984 est.	10	576	1,388	752	
Tanzania					
1979-82	28	543	1,042	62	Despite the reported increase in coffee exports, total exports declined in 1982. Small increases projected for imports are based on continuing foreign exchange constraints. Increasing debt-service obligations will likely reduce reserves further.
1982 prel.	12	550	1,143	95	
1983 est.	5	555	1,194	115	
1984 est.	5	580	1,253	138	
Uganda					
1979-82	10	335	377	51	Export decrease in 1982 stemmed from low coffee prices, despite recovered production. Continuing low prices for coffee will probably lead to exports--increasing very little. Imports, while increasing faster than exports, will be limited by foreign exchange constraints.
1982 prel.	NA	310	385	122	
1983 est.	NA	310	385	104	
1984 est.	NA	316	384	51	
East Africa, total					
1979-82	972	3,459	6,250	662	
1982 prel.	703	3,252	6,821	1,315	
1983 est.	630	3,304	7,231	1,486	
1984 est.	620	3,449	7,654	1,454	

NA = Not available.

Table 29.--East Africa import requirements and aid needs to support cereal stock adjustments 1/

Country	Estimated stock increment		Import requirements				Aid needs			
			Quantity		Value		Quantity		Value	
	Quantity	Value	Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based
	1,000 tons	Million dollars	1,000 tons		Million dollars		1,000 tons		Million dollars	
Ethiopia										
Cereals										
1983/84	34	5	566	2,388	77	326	484	2,306	66	315
1984/85	23	3	622	2,479	89	353	542	2,400	77	342
Total										
1983/84	--	5	--	--	77	326	--	--	66	315
1984/85	--	3	--	--	89	353	--	--	77	342
Kenya										
Cereals										
1983/84	-164	-46	154	915	44	259	51	812	14	230
1984/85	113	33	681	1,415	201	418	575	1310	170	387
Total										
1983/84	--	-46	--	--	44	259	--	--	14	230
1984/85	--	33	--	--	201	418	--	--	170	387
Somalia										
Cereals										
1983/84	26	10	381	319	148	124	309	247	120	96
1984/85	18	7	383	320	155	129	309	245	125	99
Total										
1983/84	--	10	--	--	214	570	--	--	181	537
1984/85	--	7	--	--	236	599	--	--	199	563
Sudan										
Cereals										
1983/84	26	5	251	528	44	93	251	528	44	93
1984/85	21	4	279	564	51	104	279	564	51	104
Total										
1983/84	--	5	--	--	27	-307	--	--	27	0
1984/85	--	4	--	--	10	-357	--	--	10	0
Tanzania										
Cereals										
1983/84	14	7	465	830	235	419	408	774	206	390
1984/85	10	5	615	979	323	515	560	924	295	487
Total										
1983/84	--	7	--	--	235	419	--	--	206	390
1984/85	--	5	--	--	323	515	--	--	295	487

1/ Includes only countries for which cereal stock data are available.
-- Not applicable.

SOUTHERN AFRICA SUBREGION

Severe drought in Southern Africa sharply cut 1983 harvests, raising import and aid requirements for most countries in the region. The drought also hit the Republic of South Africa, normally a large corn exporter, producing the poorest corn crop in 10 years. Consequently, South Africa will likely import about 2 million tons during 1983/84, and its exports will cease or fall to very low levels. This is unlike the drought situation 10 years ago, when South Africa was able to export over 150,000 tons.

Grain import needs for the food aid recipients of the region have increased greatly for 1983/84. To maintain status quo consumption levels, the region will require nearly 2 million tons, up about 50 percent from the previous year. Estimated cereal aid needs, at 1.3 million tons, account for two-thirds of this total and have doubled from last year. Mozambique has the largest nominal requirements, followed by Madagascar, Lesotho, Swaziland, and Zambia. But per capita, Lesotho and Swaziland have particularly severe food aid needs. Only Malawi, with large stocks and a crop little affected by drought, will not have to depend on food aid this year.

In addition to the regular food aid countries, Botswana and Zimbabwe may receive assistance as a result of a drought. Inclusion of these two countries would add about 265,000 tons to the region's grain import requirements. Zimbabwe will probably remain a net exporter of all cereals while needing wheat imports. Botswana's case is more critical, with virtually no cushion of stocks.

Botswana

Botswana, although not normally covered in this report, faces a very tight grain supply situation in early 1983. There is no strategic reserve of grain left, as stocks of corn are very low and sorghum stocks are exhausted. The total cereal harvest is estimated at only 10,000 tons, compared to 50,000 tons in a normal year. With consumption estimated at 140,000 tons, the shortfall is about 130,000 tons.

Most imported cereals are normally purchased from South Africa, but this option now appears unlikely. Increased food aid will be essential this year, with Botswana's commercial import capacity low. The depressed mineral market has weakened its economy.

Comoros

In January 1983, Cyclone Elinah swept through the Comoros. On the islands of Moheli and Anjouan, banana and clove trees were severely damaged. Bananas provide the mainstay of the diet. Root crops must fill some of the gap, but increased rice imports will be necessary until bananas return to production early in 1984. Cloves are a primary source of foreign exchange, and as clove trees require 8 years to reach maturity, the outlook for export earnings from cloves is quite bleak. For the Comoros Islands, substantial donations of rice, meat, pulses, vegetable oil, and dairy products and substitutes (NFDM and CSM), provide the only nutritional balance to an otherwise heavily starchy diet. Population growth, a deteriorating export

earnings base, and soil erosion problems all contribute to an outlook for increased food aid needs in the future.

Lesotho

Lesotho's crop conditions in early 1983 deteriorated because of very severe drought. Production in 1983 is estimated to be the lowest in many years. Grain-equivalent import needs are forecast at about 325,000 tons. In March, a national food emergency was declared, and the Government has requested external assistance.

In addition to drought, the country has experienced increased political unrest, and relations with South Africa have deteriorated. Since Lesotho would prefer to be less dependent on South Africa for its corn supplies, and since in 1983 South Africa has itself become a corn importer, Lesotho may now become a much more active seeker of food aid than in previous years.

Imports during 1983/84 will likely be at record highs. Even in 1982, cereal production was a relatively low 110 kilograms per capita. Although per capita wheat consumption has dropped somewhat, Lesotho's consumption of about 77 kilograms per capita is very high for a Sub-Saharan African country. Lesotho is dependent on imports for about two-thirds of its wheat requirements. South Africa has sufficient exportable wheat supplies and likely will export about 30,000 tons to Lesotho.

Large remittances, estimated at over $300 million, are earned annually by Lesotho workers in South Africa, which make possible Lesotho's a relatively high level of imports. The outlook for mining in South Africa will be a factor determining food aid requirements in 1983. Last year the number of Basotho in South African gold mines increased by about 2.6 percent and their earnings rose sharply to $102.6 million.

Madagascar

A series of cyclones struck Madagascar in February 1982, flooding rice paddies in the Antananarivo area and damaging the coffee crop and primary roads. Consequently, 1982/83 rice imports were a record 300,000 tons, while coffee exports registered a low of 44,600 tons. Rice is the basis of the Malagasy diet, providing over half of the calories consumed. Coffee is the primary source of foreign exchange, usually contributing about a third of export earnings. The coincidence of these production shortfalls has adversely affected Madagascar's balance of trade, and high short-term interest rates have increased the debt-service ratio from 30 percent in 1981 to 55 percent in 1982. It is projected to reach 77 percent in 1983.

The Malagasy Government, in concert with the IMF and a consortium of creditors, has adopted several policies to promote self-sufficiency in rice production and conserve foreign exchange. Consumer subsidies on rice in the capital city of Antananarivo have been lifted, raising the price 87 percent. Producer prices have also been raised, and there is a policy of gradual market liberalization in the pricing of

transportation services. Each of these measures should encourage greater marketed production and increased efficiency in distribution and consumption.

The outlook for 1983/84 is uncertain. Weather has been unseasonably dry in Madagascar through April 1983. Drought in Tulear province may force a premature reduction in the livestock herd. Paddy production might not be greatly affected, but corn production may fall. And rice imports will probably be high, ranging between 150,000 and 200,000 tons in 1983/84. There is a perennial shortage of vegetable oil.

Malawi

Malawi was not as badly affected by the southern African drought as its neighbors further south. Instability in southern Africa poses a potentially more serious near-term problem to Malawi. Guerrilla attacks on the railroad line from Malawi through Mozambique held up fertilizer shipments early in 1983, when emergency shipments were necessary. Assistance was provided by neighboring countries, including South Africa and Zambia. Fuel supplies have also been disrupted and exports have been rerouted.

An impressive complex of 48 grain storage silos, with a total capacity of 180,000 tons, has been constructed at the new capital of Lilongwe. Smallholders planted more corn in 1981 and 1982, and good harvests allowed Malawi to accumulate stocks. Therefore, given a fair harvest in 1983, Malawi will have adequate corn supplies and will not require any imports. However, other crops such as peanuts, rice, and tobacco could be inadequate.

Despite import constraints during 1981 and 1982, and increased agricultural production in 1982, Malawi again had a slight balance-of-payments deficit during 1982, although the trade balance was slightly positive. Debt-service costs now exceed 30 percent of exports, compared with about 10 percent in the mid-1970's.

Mauritius

Mauritius continues to import almost all of its staple foods, wheat and rice. Most arable land is devoted to production of sugar for export, although fruit and vegetables are grown for domestic consumption. The new Government, elected in June 1982, is encouraging more food production. Output of potatoes, tomatoes, onions, and beans has increased dramatically during the last few years. There is little potential, however, for local rice production.

Rice and wheat imports are estimated at 138,000 tons for 1982/83, down slightly from the previous year, reflecting lower export earnings due to depressed world sugar prices. Imports should increase slightly in 1983/84.

Mozambique

The worst drought in at least 50 years crippled 1982/83 agricultural production in the southern half of Mozambique. Almost total crop losses are expected in this region. In the central and northwestern areas, below-average production is

expected. Only the less populated northeast had normal rainfall. At least 4 million people have been affected by unusual food shortages. This severe weather aggravates Mozambique's chronic difficulties with agricultural productivity.

This situation is further compounded by widespread guerrilla warfare and sabotage by a movement opposing the Government. The already fragile economy has been hurt particularly in the transport and distribution sector. Port and railway services have been hampered, reducing essential foreign exchange earnings from the transit trade of neighboring countries. Mozambique's small exports, primarily agricultural, will also decrease in 1983.

Food aid--usually substantial--will increase significantly. For 1983/84, grain import requirements are estimated at over 650,000 tons, with aid needs comprising over 70 percent. The concessional portion of grain imports has been steadily increasing in recent years. To meet this latest crisis, the Government launched an appeal for 100,000 tons of emergency food aid in early 1983. At least 10 donors, including the United States, have responded. Relations between Mozambique and the Western industrial countries have shown signs of improvement recently. Mozambique may soon join the Lome Convention, which would qualify it for more economic assistance.

Mozambique will remain dependent on food aid for the near future. Improvements in the weather will not be sufficient to raise production to adequate levels without accompanying changes in production performance and policy. Most investment is allocated to State farms rather than to the much larger family farm sector. Marketing linkages are very weak, reducing incentives for farmers to produce goods that cannot reach markets. Finally, commercial import capacity will remain low in the face of slow or negative economic growth.

Swaziland

Swaziland was seriously affected by the severe drought in southern Africa in early 1983, and its 1983 corn crop will consequently be below average. A late start in plowing likely reduced yields. Production in 1982 was also down because of drought, and food shortages were reported in early 1983. The FAO World Food Program (WFP) assistance was in effect in drought areas. With a very disappointing crop projected for 1983, grain import requirements for 1983/84 may total as much as 113,000 tons.

Swaziland is one of Africa's major sugar exporters and its economy is usually buoyant. But because of low world sugar prices, the value of exports dropped in 1982, while imports continued to increase. Swaziland's debt service remains relatively moderate, but its trade deficit could continue to grow in the absence of better international sugar prices.

Zambia

Poor weather in the last two seasons has depressed Zambia's agricultural production, offsetting the favorable effects of promising policy changes. Scattered drought and poorly timed rains will again hold down corn marketings despite large plantings. Marketed production in 1982/83 was about 510,000 tons, at least 200,000 below minimum demand levels, and marketings for the current year should be similar. With stocks drawn down, emergency food aid has become necessary to meet consumption requirements during the period before the 1983 harvest becomes available.

Recent shifts in agricultural policies--increased producer prices, reduced tax levels, and changes in marketing arrangements--have increased production incentives for farmers. Better weather in the next growing season could lead to large improvements in production and bring Zambia close to self-sufficiency in corn--the major cereal. Wheat production is slowly increasing but still accounts for only about 10 percent of domestic needs. Although rice is a less important commodity, some increases in its output are also being achieved. However, continued foreign exchange pressures could mean shortages of necessary inputs, constraining agricultural output.

Zambia's economy deteriorated further in 1982 and is probably in its worst condition since independence in 1964. This is largely due to severely depressed world prices for its copper and cobalt exports. Real copper prices slumped to their lowest level in 40 years in 1982, while shortages of investment, skilled personnel, and spare parts held back mineral output. Government mineral revenues (which once represented over 50 percent of income) fell to nothing. Along with a worsening trade account, debt service payments have expanded rapidly. Zambia's arrears in foreign payments were equivalent to some 70 percent of last year's total export revenues. Reserves are also very low, making the country a poor credit risk.

Grain import needs are conservatively estimated at nearly 300,000 tons for 1983/84, with food aid of critical importance. Even assuming a significant increase in next year's grain output, imports will probably be needed to rebuild stocks. Debt rescheduling and support from the IMF appear likely, leading to a restructuring program. By early 1983, the Zambian Government had already devalued the currency by 20 percent, decontrolled many consumer prices, and reduced subsidies.

Zimbabwe

Although not normally covered in this survey, Zimbabwe may temporarily require food aid in 1983/84 because of the severe drought that affected southern Africa in the 1982/83 growing season. This would represent a reversal from the last 2 years, when Zimbabwe was a net food exporter and net provider of food aid. It donated corn directly to Mozambique and Tanzania, while supplying large amounts to many African countries indirectly through the World Food Program and other donors. During this period Zimbabwe received some wheat under

trilateral arrangements with the United States and Australia; under the arrangements, Zimbabwe provided corn of equal value to Zambia and Mozambique, respectively. Zimbabwe has also received small amounts of dairy products and vegetable oil as aid.

In spite of a much lower crop, corn imports will not be needed and previous export commitments amounting to some 300,000 tons will be met because of large stocks. However, wheat and vegetable oil imports will increase sharply and will be difficult to finance because of foreign exchange shortages. Wheat is entirely irrigated but shortages of water will mean that the 1983 crop will be down by at least half and possibly more. This would imply import needs as high as 120,000 to 150,000 tons. In addition, vegetable oil needs will approach 20,000 tons because production of soybeans and cottonseed were also held back by the drought.

Table 30.--Southern Africa basic food data

Country/commodity	Actual or forecast production	Actual or targeted beginning stocks	Net imports	Use: Nonfeed use	Use: Feed use	Use: Total use	Actual or targeted ending stocks	Actual or forecast population	Per capita nonfeed use	Commodities covered and share of daily per capita caloric intake: Commodity	Percent
	1,000 tons							Thousands	Kilos		
Comoros											
Major cereals											
1979/80-1982/83	3	0	26	29	0	29	0	378	75	Rice	27.8
1982/83 prel.	3	0	29	32	0	32	0	398	80	Cassava	25.7
1983/84 est.	3	0	--	--	0	--	0	413	--	Bananas	16.1
1984/85 est.	3	0	--	--	0	--	0	425	--	Total	69.6
Roots and tubers											
1979/80-1982/83	74	0	0	74	0	74	0	378	196		
1982/83 prel.	70	0	0	70	0	70	0	398	176		
1983/84 est.	75	0	--	--	0	--	0	413	--		
1984/85 est.	82	0	--	--	0	--	0	425	--		
Lesotho											
Major cereals										Wheat	25.8
1979/80-1982/83	201	0	169	356	14	370	0	1,355	263	Corn	37.0
1982/83 prel.	146	0	215	347	14	361	0	1,410	246	Sorghum	13.5
1983/84 est.	70	0	--	--	14	--	0	1,449	--	Total	76.3
1984/85 est.	210	0	--	--	15	--	0	1,490	--		
Madagascar											
Major cereals										Wheat	1.8
1979/80-1982/83	1,501	0	302	1,803	0	1,803	0	8,668	208	Rice	58.1
1982/83 prel.	1,405	0	398	1,803	0	1,803	0	8,991	201	Corn	4.3
1983/84 est.	1,517	0	--	--	0	--	0	9,216	--	Total	64.2
1984/85 est.	1,546	0	--	--	0	--	0	9,446	--		
Malawi											
Major cereals										Wheat	1.2
1979/80-1982/83	1,238	0	41	1,226	52	1,278	0	6,199	197	Corn	65.2
1982/83 prel.	1,400	0	35	1,375	60	1,435	0	6,467	213	Total	66.4
1983/84 est.	1,350	0	--	--	56	--	0	6,687	--		
1984/85 est.	1,350	0	--	--	58	--	0	6,915	--		
Mauritius											
Major cereals										Rice	30.8
1979/80-1982/83	0	0	142	142	0	142	0	965	147	Wheat and flour	21.1
1982/83 prel.	0	0	138	138	0	138	0	990	139	Total	51.9
1983/84 est.	0	0	--	--	0	--	0	1,007	--		
1984/85 est.	0	0	--	--	0	--	0	1,022	--		
Mozambique											
Major cereals										Wheat	4.9
1979/80-1982/83	606	0	387	993	0	993	0	12,188	81	Rice	3.4
1982/83 prel.	645	0	433	1,078	0	1,078	0	12,694	85	Corn	18.6
1983/84 est.	403	0	--	--	0	--	0	13,046	--	Cassava	37.1
1984/85 est.	723	0	--	--	0	--	0	13,412	--	Sorghum	9.2
										Millet	.3
										Total	73.4
Roots and tubers											
1979/80-1982/83	2,825	0	0	2,825	0	2,825	0	12,188	232		
1982/83 prel.	2,950	0	0	2,950	0	2,950	0	12,694	232		
1983/84 est.	3,000	0	--	--	0	--	0	13,046	--		
1984/85 est.	3,000	0	--	--	0	--	0	13,412	--		

Continued--

Table 30.--Southern Africa basic food data--continued

Country/commodity	Actual or forecast production	Actual or targeted beginning stocks	Net imports	Use: Nonfeed use	Use: Feed use	Use: Total use	Actual or targeted ending stocks	Actual or forecast population	Per capita nonfeed use	Commodities covered and share of daily per capita caloric intake: Commodity	Percent
	1,000 tons							Thousands	Kilos		
Swaziland											
Major cereals										Corn	55.4
1979/80-1982/83	85	0	55	97	43	140	0	565	171	Sorghum	.9
1982/83 prel.	72	0	73	95	50	145	0	590	161	Milk	4.4
1983/84 est.	37	0	--	--	46	--	0	605	--	Total	60.6
1984/85 est.	82	0	--	--	47	--	0	621	--		
Milk											
1979/80-1982/83	37	0	7	44	0	44	0	565	77		
1982/83 prel.	38	0	7	45	0	45	0	590	76		
1983/84 est.	36	0	--	--	0	--	0	605	--		
1984/85 est.	39	0	--	--	0	--	0	621	--		
Zambia											
Major cereals										Wheat	8.1
1979/80-1982/83	820	49	187	982	33	1,014	42	5,926	165	Rice	.7
1982/83 prel.	817	60	233	1,040	40	1,080	30	6,209	167	Corn	53.1
1983/84 est.	818	30	--	--	35	--	30	6,398	--	Total	62.0
1984/85 est.	1,021	30	--	--	36	--	30	6,590	--		
Southern Africa, total											
Major cereals											
1979/80-1982/83	4,453	49	1,308	5,627	141	5,768	42	--	--		
1982/83 prel.	4,488	60	1,554	5,908	164	6,072	30	--	--		
1983/84 est.	4,198	30	--	--	152	--	30	--	--		
1984/85 est.	4,935	30	--	--	156	--	30	--	--		
Roots and tubers											
1979/80-1982/83	2,899	0	0	2,899	0	2,899	0	--	--		
1982/83 prel.	3,020	0	0	3,020	0	3,020	0	--	--		
1983/84 est.	3,075	0	--	--	0	--	0	--	--		
1984/85 est.	3,082	0	--	--	0	--	0	--	--		
Milk											
1979/80-1982/83	37	0	7	44	0	44	0	--	--		
1982/83 prel.	38	0	7	45	0	45	0	--	--		
1983/84 est.	36	0	--	--	0	--	0	--	--		
1984/85 est.	39	0	--	--	0	--	0	--	--		

-- Not applicable.

Table 31.--Southern Africa food requirements, import requirements, and food aid needs to support consumption, status quo- and nutrition-based estimates

Country/ commodity	Forecast domestic production	Total use 1/		Import requirements				Commercial import capacity		Food aid needs			
				Quantity		Value				Quantity		Value	
		Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based			Status quo	Nutrit. based	Status quo	Nutrit. based
	1,000 tons					Million dollars		1,000 tons	Million dollars	1,000 tons		Million dollars	
Comoros													
Major cereals													
1983/84	3	31	28	28	25	--	--	--	--	--	--	--	--
1984/85	3	32	28	29	25	--	--	--	--	--	--	--	--
Roots and tubers													
1983/84	75	81	196	6	121	--	--	--	--	--	--	--	--
1984/85	82	83	203	1	121	--	--	--	--	--	--	--	--
Total 2/													
1983/84	--	--	--	30	62	9	19	12	4	18	50	5	15
1984/85	--	--	--	30	63	9	20	5	2	24	58	8	18
Lesotho													
Major cereals													
1983/84	70	395	333	325	263	65	53	66	13	259	197	52	39
1984/85	210	407	372	197	162	41	34	66	14	131	96	27	20
Madagascar													
Major cereals													
1983/84	1,517	1,917	1,720	400	203	113	57	28	8	372	175	105	49
1984/85	1,546	1,965	1,761	419	215	123	63	53	16	366	162	107	47
Malawi													
Major cereals													
1983/84	1,350	1,377	1,510	27	160	7	40	27	7	0	132	0	33
1984/85	1,350	1,424	1,555	74	205	19	53	34	9	40	171	10	44
Mauritius													
Major cereals													
1983/84	0	148	137	148	137	41	38	136	37	12	1	3	3/
1984/85	0	151	139	151	139	43	40	148	42	3	0	1	0
Mozambique													
Major cereals													
1983/84	403	1,062	1,335	659	932	--	--	--	--	--	--	--	--
1984/85	723	1,092	1,407	369	684	--	--	--	--	--	--	--	--
Roots and tubers													
1983/84	3,000	3,024	3,848	24	848	--	--	--	--	--	--	--	--
1984/85	3,000	3,109	3,952	109	952	--	--	--	--	--	--	--	--
Total 2/													
1983/84	--	--	--	669	1,272	154	293	185	43	484	1,087	111	250
1984/85	--	--	--	413	1,066	99	256	177	43	235	888	57	213
Swaziland													
Major cereals													
1983/84	37	150	142	113	105	--	--	--	--	--	--	--	--
1984/85	82	153	152	71	70	--	--	--	--	--	--	--	--
Total above 2/													
1983/84	--	--	--	113	105	19	18	17	3	95	4/ 87	16	15
1984/85	--	--	--	71	70	13	13	16	3	55	4/ 49	10	4/ 9
Milk													
1983/84	36	47	40	11	4	6	2	5	2	6	0	3	0
1984/85	39	48	42	9	3	5	1	5	2	4	0	2	0
Total													
1983/84	--	--	--	--	--	25	20	--	5	--	--	19	15
1984/85	--	--	--	--	--	17	14	--	5	--	--	12	9

(Footnotes at end of table.)

Continued--

Table 31.--Southern Africa food requirements, import requirements, and food aid needs to support consumption, status quo- and nutrition-based estimates--continued

Country/ commodity	Forecast domestic production	Total use 1/ Status quo	Total use 1/ Nutrit. based	Import requirements Quantity Status quo	Import requirements Quantity Nutrit. based	Import requirements Value Status quo	Import requirements Value Nutrit. based	Commercial import capacity 1,000 tons	Commercial import capacity Million dollars	Food aid needs Quantity Status quo	Food aid needs Quantity Nutrit. based	Food aid needs Value Status quo	Food aid needs Value Nutrit. based
	1,000 tons					Million dollars		1,000 tons	Million dollars	1,000 tons		Million dollars	
Zambia													
Major cereals													
1983/84	818	1,093	1,387	275	569	50	104	202	37	73	368	13	67
1984/85	1,021	1,126	1,476	105	455	20	87	257	49	0	197	0	38
Southern Africa, total													
Total, major cereals and roots and tubers 2/													
1983/84	--	--	--	1,988	2,772	458	621	--	--	1,314	2,097	307	470
1984/85	--	--	--	1,459	2,376	368	566	--	--	854	1,622	220	390
Milk													
1983/84	--	--	--	11	4	6	2	--	--	6	0	3	0
1984/85	--	--	--	9	3	5	1	--	--	4	0	2	0
Total													
1983/84	--	--	--	--	--	464	624	--	--	--	--	310	470
1984/85	--	--	--	--	--	372	567	--	--	--	--	222	390

1/ The sum of targeted nonfeed and feed use.
2/ Cereal equivalent.
3/ Less than 1.
4/ Surplus milk capacity partially offsets cereal aid needs.
-- Not applicable.

Table 32.--Summary of Soutnern Africa cereal import requirements and food aid needs to support consumption, status quo- and nutrition-based estimates

Country	1982/83 imports	1983/84 Import requirements Status quo	1983/84 Import requirements Nutrit. based	1983/84 aid needs Status quo	1983/84 aid needs Nutrit. based
	1,000 tons				
Comoros	29	30	62	18	50
Lesotho	215	325	263	259	197
Madagascar	398	400	203	372	175
Malawi	35	27	160	0	132
Mauritius	138	148	137	12	1
Mozambique	433	669	1,272	484	1,087
Swaziland	73	113	105	95	87
Zambia	233	275	569	73	368
Southern Africa, total	1,554	1,988	2,772	1,314	2,097

Table 33.--Southern Africa financial indicators, actual and projected

Country and year	International reserves yearend	Exports (f.o.b.)	Imports (f.o.b.)	Debt service due	1983 and 1984 conditions as of April 1983
		Million dollars			
Comoros					
1979-82	6	11	14	1	Vanilla and cloves are the islands' major sources of foreign exchange. High vanilla prices compensated for a shortfall in clove production in 1982. The severe storms which struck the islands in January 1983 destroyed many clove trees and production will be low over the next few years.
1982 prel.	7	15	16	1	
1983 est.	5	9	17	1	
1984 est.	5	8	18	3	
Lesotho					
1979-82	35	404	428	7	Remittances helped offset the huge trade deficit, but the current account remains in deficit and will likely continue so through 1984. Reduced diamond exports in 1983 could drop exports and widen trade gap.
1982 prel.	48	420	419	10	
1983 est.	40	420	450	11	
1984 est.	40	440	486	10	
Madagascar					
1979-82	1	383	553	108	Low coffee and clove prices and weak industrial demand for graphite dampened foreign exchange earnings in 1982/83; earnings are unlikely to improve significantly in 1983/84, despite devaluation of the Malagasy franc.
1982 prel.	9	300	537	217	
1983 est.	27	315	568	273	
1984 est.	20	320	603	238	
Malawi					
1979-82	53	252	306	79	Exports are estimated to have fallen in 1982 as sugar prices and export volumes dropped, outweighing tobacco gains. Increasing debt-service payments and continuing trade deficits may draw down reserves.
1982 prel.	26	205	290	115	
1983 est.	25	220	300	104	
1984 est.	25	240	315	95	
Mauritius					
1979-82	48	361	481	38	Low market sugar prices reduced Mauritius' export earnings considerably in 1982-83; although sugar prices firmed in early 1983, earnings are unlikely to equal import costs in 1983/84. Protectionist measures in the United States and the EEC have reduced revenues for wool sweaters, Mauritius' second largest source of foreign exchanges.
1982 prel.	36	320	470	55	
1983 est.	30	355	500	79	
1984 est.	30	390	540	77	
Mozambique					
1979-82	NA	NA	NA	NA	Anti-Government guerillas inflicted increased damage on ports, rails, and roads in 1982. Agricultural production is low, and current drought will further depress production and exports.
1982 prel.	NA	NA	NA	NA	
1983 est.	NA	NA	NA	NA	
1984 est.	NA	NA	NA	NA	
Swaziland					
1979-82	118	217	276	14	Export decline in 1982 resulted from low sugar prices. Sugar accounts for about 50 percent of all exports. The 1982 drop in imports was caused partly by completion of major investment projects, hence a decline in imports of investment goods.
1982 prel.	89	257	325	19	
1983 est.	85	265	330	21	
1984 est.	85	270	340	23	
Zambia					
1979-82	65	1,164	1,144	380	Low world copper prices reduced 1982 export earnings. Projected slow growth in world copper demand leads to projected small increases in exports. Jump in debt-service obligations through 1984 could reduce reserves.
1982 prel.	45	932	1,062	395	
1983 est.	45	1,065	1,050	420	
1984 est.	50	1,272	1,100	420	
Southern Africa, total					
1979-82	326	2,792	3,200	626	
1982 prel.	251	2,449	3,119	811	
1983 est.	230	2,649	3,215	908	
1984 est.	235	2,940	3,402	866	

NA = Not available.

Table 34.--Southern Africa import requirements and aid needs to support cereal stock adjustments 1/

Country	Estimated stock increment		Import requirements				Aid needs			
			Quantity		Value		Quantity		Value	
	Quantity	Value	Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based
	1,000 tons	Million dollars	1,000 tons		Million dollars		1,000 tons		Million dollars	
Zambia										
Cereals										
1983/84	13	2	288	582	53	107	86	381	16	70
1984/85	10	2	115	465	22	89	0	208	0	40
Total										
1983/84	--	2	--	--	53	107	--	--	16	70
1984/85	--	2	--	--	22	89	--	--	0	40
Southern Africa, total										
Cereals										
1983/84	13	2	2,001	2,785	461	624	1327	2111	309	472
1984/85	10	2	1,469	2,386	369	567	711	1628	192	390
Total										
1983/84	--	2	--	--	466	626	--	--	312	472
1984/85	--	2	--	--	374	569	--	--	195	390

1/ Includes only countries for which cereal stock data are available.
-- Not applicable.

MIDDLE EAST SUBREGION

With increased revenues from petroleum exports, foreign worker remittances, and other services, most Middle East countries have sufficient revenues to import food and are no longer in need of food aid. Three countries that received coverage in previous editions of this report--Israel, Jordan, and Syria--have been dropped for this reason. However, the Yemen Arab Republic (YAR), the People's Democratic Republic of Yemen (PDR), and Lebanon continue to receive small amounts of assistance.

Adequate rainfall resulted in average grain harvests in the Yemens in 1982/83, while in Lebanon cereal production was down. All three countries made large grain purchases again in 1982/83 through government-to-government agreements. Together, the two Yemens imported about 720,000 tons of grain, most of which was wheat. In food assistance, the YAR received 26,000 tons of wheat and the PDR 33,000 tons. Lebanon purchased an estimated 710,000 tons of grain, and reexported 91,000 tons. Food assistance accounted for about 55,000 tons of Lebanese cereal imports.

Because wheat demand is strong in all three countries, cereal imports are expected to expand marginally in 1983/84. Lebanon will continue to receive some energency assistance for displaced persons.

Lebanon

Lebanese cereal production has been declining slightly since the onset of fighting in the Beqaa Valley, the main wheat-growing area. The continuing shift of land from cereals to horticulture, plus low rainfall during the winter sowing period, further contributed to the production slump in 1981/82, with grain output a low 32,000 tons. Assuming improved weather and more peaceful conditions, output is expected to expand in 1983/84.

Food supplies remain below the FAO recommended minimum. Per capita food grain availabilities were only 135 kilograms in 1982/83, but they are forecast to expand in 1983/84 because of increased production and imports. A critical food problem was averted in 1982 when the FAO provided food assistance to an estimated 600,000 displaced persons for 6 months. Through the World Food Program, 54,000 tons of grain and smaller quantities of dry milk, vegetable oil, and sugar were provided in the form of relief assistance.

Net grain imports were estimated at 619,000 tons in 1982/83, of which wheat and flour accounted for 410,000. Corn, barley, and rice were also imported, while some corn and barley were reexported. The Government currently purchases wheat from Canada under a long-term agreement and from other suppliers--mainly the EC and United States--on buying tenders. Except for emergency assistance, food aid currently is not a major factor in filling Lebanon's import requirements.

People's Republic of Yemen (PDR)

Cereal production, mainly millet, was on trend in 1982/83 at about 112,000 tons. Recent favorable changes in input prices, amounts of mechanization, and extent of irrigation are expected to lead to higher grain output in 1983/84.

Bolstered by larger imports of wheat and rice, food supplies have increased in recent years. Gross per capita food grain availabilities were 162 kilograms in 1982/83, boosted by about 225,000 tons of imported grain--mostly wheat. On a government-to-government agreement, the PDR purchases 100,000 tons of wheat annually from Australia, while commercial purchases of rice are made from Thailand and Pakistan. Food aid generally has not been a significant factor in fulfilling import needs, though in 1982 the World Food Program provided some food assistance to flood victims in the south.

Because of rising imports and declining fish and cotton exports, the trade deficit has worsened in the early 1980's. In 1983, imports are expected to exceed exports by over $500 million.

Yemen Arab Republic (YAR)

Grain production in 1982/83 was about 812,000 tons, an average harvest. Output of sorghum, the primary cereal, was 640,000 tons, marginally above preceding years. However, sorghum output has declined about 50 percent from mid-1970's levels. Area planted to grains has increasingly been cultivated to vegetables and variety plants.

Food supplies are currently adequate because of increased Government attention to consumption requirements after the near-famine conditions of 1967-73. The Government has imported basic foodstuffs, which are sold at controlled prices. Per capita grain supplies for food use were 221 kilograms in 1982/83, of which sorghum and wheat were the major components.

Yemen imported 495,000 tons of cereal in 1982/83, slightly less than the year before. Wheat and flour were the main components. During 1983/84, the Government plans to purchase 345,000 tons of wheat and 25,000 tons of rice from the United States under the blended-credit program. Both status quo- and nutrition-based estimates suggest that over 500,000 tons of grain imports would be needed in 1983/84 to uphold current and targeted consumption standards.

Table 35.--Middle East basic food data

Country/commodity	Actual or forecast production	Actual or targeted beginning stocks	Net imports	Use: Nonfeed use	Use: Feed use	Use: Total use	Actual or targeted ending stocks	Actual or forecast population	Per capita nonfeed use	Commodities covered and share of daily per capita caloric intake: Commodity	Percent
	1,000 tons							Thousands	Kilos		
Lebanon											
Major cereals										Wheat	48.6
1979/80-1982/83	38	108	579	404	203	607	118	3,060	132	Rice	2.4
1982/83 prel.	45	122	619	428	200	628	158	3,179	135	Corn	2.1
1983/84 est.	34	158	--	--	216	--	158	3,262	--	Barley	.1
1984/85 est.	38	158	--	--	222	--	158	3,347	--	Total	53.2
North Yemen (YAR)											
Major cereals										Wheat	15.0
1979/80-1982/83	801	34	460	1,161	107	1,268	28	5,314	218	Rice	.5
1982/83 prel.	812	40	495	1,216	121	1,337	10	5,504	221	Corn	4.4
1983/84 est.	803	10	--	--	113	--	10	5,647	--	Sorghum	44.9
1984/85 est.	816	10	--	--	117	--	10	5,799	--	Barley	1.4
										Total	66.2
South Yemen (PDR)											
Major cereals										Wheat	25.9
1979/80-1982/83	110	31	211	302	12	313	39	1,932	156	Rice	10.7
1982/83 prel.	112	40	225	324	13	337	40	2,001	162	Corn	2.8
1983/84 est.	111	40	--	--	12	--	40	2,049	--	Sorghum	1.1
1984/85 est.	112	40	--	--	13	--	40	2,098	--	Millet	18.0
										Barley	.1
										Total	58.6
Middle East, total											
Major cereals											
1979/80-1982/83	950	173	1,250	1,867	321	2,188	184	--	--		
1982/83 prel.	969	202	1,339	1,968	334	2,302	208	--	--		
1983/84 est.	948	208	--	--	342	--	208	--	--		
1984/85 est.	966	208	--	--	351	--	208	--	--		

-- Not applicable.

Table 36.--Middle East food requirements, import requirements, and food aid needs to support consumption, status quo- and nutrition-based estimates

Country/commodity	Forecast domestic production	Total use 1/: Status quo	Total use 1/: Nutrit. based	Import requirements: Quantity: Status quo	Import requirements: Quantity: Nutrit. based	Import requirements: Value: Status quo	Import requirements: Value: Nutrit. based	Commercial import capacity		Food aid needs: Quantity: Status quo	Food aid needs: Quantity: Nutrit. based	Food aid needs: Value: Status quo	Food aid needs: Value: Nutrit. based
	1,000 tons					Million dollars		1,000 tons	Million dollars	1,000 tons		Million dollars	
Lebanon													
Major cereals													
1983/84	34	647	803	613	769	109	136	537	95	77	232	14	41
1984/85	38	664	825	626	787	116	145	483	89	144	304	27	56
Yemen YAR													
Major cereals													
1983/84	803	1,347	1,307	544	504	124	115	365	83	179	139	41	32
1984/85	816	1,383	1,341	567	525	135	125	374	89	193	151	46	36
Yemen (PDR)													
Major cereals													
1983/84	111	332	363	221	252	66	75	199	59	21	52	6	16
1984/85	112	339	371	227	259	71	81	199	62	29	60	9	19
Middle East, Total													
Cereal equivalent													
1983/84	--	--	--	--	--	298	326	--	--	--	--	61	88
1984/85	--	--	--	--	--	321	351	--	--	--	--	81	111

1/ The sum of targeted nonfeed and feed use.
-- Not applicable.

Table 37.--Summary of Middle East cereal import requirements and food aid needs to support consumption, status quo and nutrition-based estimates

Country	1982/83 imports	1983/84 import requirements: Status quo	1983/84 import requirements: Nutrit. based	1983/84 aid needs: Status quo	1983/84 aid needs: Nutrit. based
	1,000 tons				
Lebanon	619	613	769	77	232
North Yemen	495	544	504	179	139
South Yemen	225	221	252	21	52
Middle East, total	1,339	1,378	1,525	277	423

Table 38.--Middle East financial indicators, actual and projected

Country and year	International reserves, yearend	Exports (f.o.b.)	Imports (f.o.b.)	Debt service due	1983 and 1984 conditions as of April 1983
	Million dollars				
Lebanon					
1979-82	1,613	870	3,130	16	Despite the internal conflict throughout 1982, exports and imports likely increased. Worker remittances, along with aid and other financial transfers, help finance massive trade deficits.
1982 prel.	1,507	950	3,400	25	
1983 est.	1,500	975	3,500	26	
1984 est.	1,550	990	3,700	28	
North Yemen (YAR)					
1979-82	1,065	1,610	2,086	39	Remittances and exports grew only slightly in 1982--not enough to offset increases in imports. Food and capital items remain the major imports. Debt service represented less than 10 percent of export earnings in 1982.
1982 prel.	587	1,922	2,245	67	
1983 est.	500	2,100	2,450	85	
1984 est.	475	2,400	2,780	105	
South Yemen (PDR)					
1979-82	244	579	652	26	Remittances and aid finance large trade deficits. Exports declined slightly in 1982 and imports may have dropped substantially.
1982 prel.	275	625	677	48	
1983 est.	250	670	742	98	
1984 est.	225	750	815	104	
Middle East, total					
1979-82	2,922	3,058	5,869	81	
1982 prel.	2,369	3,497	6,322	140	
1983 est.	2,250	3,745	6,692	209	
1984 est.	2,250	4,140	7,295	237	

Table 39.--Middle East import requirements and aid needs to support cereal stock adjustments 1/

Country	Estimated stock increment		Import requirements				Aid needs			
			Quantity		Value		Quantity		Value	
	Quantity	Value	Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based
	1,000 tons	Million dollars	1,000 tons		Million dollars		1,000 tons		Million dollars	
Lebanon										
Cereals										
1983/84	1	2/	614	770	109	136	78	234	14	41
1984/85	4	T	630	791	116	146	148	308	27	57
Total										
1983/84	--	2/	--	--	109	136	--	--	14	41
1984/85	--	T	--	--	116	146	--	--	27	57
North Yemen (YAR)										
Cereals										
1983/84	16	4	561	520	128	119	195	155	44	35
1984/85	12	3	579	537	138	128	205	163	49	39
Total										
1983/84	--	4	--	--	128	119	--	--	44	35
1984/85	--	3	--	--	138	128	--	--	49	39
South Yemen (PDR)										
Cereals										
1983/84	4	1	225	256	67	76	25	56	7	17
1984/85	4	1	232	263	72	82	33	65	10	20
Total										
1983/84	--	1	--	--	67	76	--	--	7	17
1984/85	--	1	--	--	72	82	--	--	10	20
Middle East, total										
Cereals										
1983/84	22	5	1,400	1,546	303	331	298	445	66	93
1984/85	20	5	1,441	1,591	326	355	386	536	86	116
Total										
1983/84	--	5	--	--	303	331	--	--	66	93
1984/85	--	5	--	--	326	355	--	--	86	116

1/ Includes only countries for which cereal stock data are available.
2/ Less than 1.
-- Not applicable.

Asia

SOUTH ASIA SUBREGION

Cereal production decreased 5.3 percent in South Asia in 1982/83 as drought-induced declines in rice production in India and Sri Lanka offset gains elsewhere in the region. The region's cereal imports increased sharply to about 5.6 million tons because of larger imports by India and Bangladesh to build stocks and offset shortfalls in production. In 1983/84, cereal production is projected to increase nearly 10 percent, based on sustained growth expected to have occurred in wheat output in spring of 1983, and assuming a normal monsoon and a return to trend rice harvests throughout the region in fall 1983.

Status quo calculations suggest that Bangladesh and Sri Lanka require cereal imports totaling about 2.0 million tons, about 1.3 million of it on concessional terms, to support consumption at the base period level. The status quo estimates are, however, biased downward because of drought reduced per capita food supplies during one or more years of the 1979/80-1982/83 base period. On average in the region, the status quo estimates support cereal consumption at about 90 percent of the recommended daily caloric intake. Nutrition-based estimates suggest that over 18 million tons of cereal imports are required in South Asia. Nutritional deficits are particularly severe in Nepal and Bangladesh. Stock adjustment calculations show that about 1.9 million tons of cereals should be added to regional stocks in 1983/84 to make progress towards adequate food security reserves.

Production of pulses, an important protein source in many South Asian diets, increased about 6.5 percent in 1982/83 because of good winter rains, but per capita pulse output remains substantially below levels achieved in the mid-1970's. Further production gains are forecast for 1983/84 and 1984/85, assuming average rainfall. Vegetable oils are becoming an increasingly important component of South Asian diets, as liberalized import policies and efforts to increase domestic production boost per capita availabilities. In 1982/83, poor weather, primarily in India, led to an estimated 7-percent drop in regional vegetable oil production and a record import level estimated at over 1.9 million tons. The assumption of normal weather leads to forecast increases in production throughout the region in 1983/84 and 1984/85.

The capacity of most South Asian countries to purchase food commercially deteriorated in 1982/83, as large trade deficits reduced foreign reserve holdings and led to increased external debt. Import capacity is likely to decline further in 1983/84 because of continued large trade deficits, reduced foreign reserve levels, and larger debt repayment obligations. Some improvement in import capacity is projected for 1984/85, based on the expectation of improved export earnings and slower growth in the cost of petroleum imports. Status quo-based cereal food aid needs in South Asia are estimated at 1.3 million tons in both 1983/84 and 1984/85. Support of status quo consumption in each country, plus stock building adjustments, would require 1.4 million of cereal food aid in 1983/84 and 1.1 million tons in 1984/85. Nutrition-based

calculations set food aid needs at 15.6 million tons of cereals and 2.6 million of pulses in 1983/84, and 15.5 million of cereals and 2.5 million of pulses in 1984/85. The huge nutritional deficits estimated in the pulse category, coupled with the relatively small amounts of pulses traded in world markets, suggest a substantial need for food aid in the form of high protein foods which might be substituted for pulses.

Afghanistan

Information on agricultural production and the food supply situation in Afghanistan has been limited since the Soviet incursion in late 1980. Current estimates indicate that food grain production has stabilized at about 3.1 million tons annually, down substantially from the pre-incursion level of nearly 4 million tons. Pressure on available food supplies has likely been reduced substantially by the departure of approximately 3 million refugees, mostly to Pakistan.

Given the projection of 1983/84 food grain production, status quo-based calculations set import requirements at 125,000 tons. The nutrition-based import requirement estimate is only slightly higher at 144,000 tons, suggesting that food supplies are nearly sufficient to provide a nutritionally adequate diet.

Recent financial data for Afghanistan are also limited. Disruptions in trade following the Soviet incursion have likely reduced Afghanistan's traditional trade surplus, thus reducing the availability of foreign exchange to purchase food. It is expected that approximately 80 percent of Afghanistan's 1983/84 status quo- and nutrition-based import requirements would have to be provided on concessional terms.

Bangladesh

Rice production in Bangladesh was up 0.3 million tons in 1982/83 to 14.0 million. Production is projected to increase further to 14.5 million in 1983/84, which would allow rice imports to decline to 30,000 tons and still maintain per capita consumption at the 1979/80-1982/83 average level. Wheat production should continue to expand because the Government is promoting wheat as a substitute for rice. For 1983/84, status-quo based food grain import requirements are calculated at 1.2 million tons. The 1983/84 import requirements for both wheat and rice are, however, biased downward to some extent by the relatively low stocks held in the 1970's. Additional imports of 200,000-400,000 tons of rice and wheat would be necessary to achieve the Government's post-harvest stock target of 1.2 million tons of rice and wheat reserves.

To achieve both the FAO recommended minimum and the level of food security stocks employed in the status quo calculation, 6.1 million tons of cereal are estimated to be needed in 1983/84. While only about one-half of this volume of cereal imports could be absorbed by the local distribution system, it is indicative of a very substantial and continuing nutrition gap. The estimated status quo cereal consumption per person is 176.1 kilograms, 22 percent below the 226.7 kilograms stipulated in the FAO recommended minimum.

Bangladesh's ability to import food commercially, although limited, stabilized somewhat during 1982. A $94 million fall in exports was offset by a $350-million decrease in imports. The overly ambitious development budget was pruned 10 percent and completion of the IMF's recommended foreign exchange review resolved Bangladesh's major credit problems with the IMF. Two unexpected developments--an increase in overseas worker remittances and the drop in the world price of oil, which comprises about 20 percent of the nation's imports--should halt growth in the trade deficit in 1983/84. Approximately 1.1 million tons (94 percent) of Bangladesh's 1983/84 status quo-based cereal import requirements will have to be met from concessional sources. Otherwise, the country will satisfy its perceived food security import requirements by starving other imports, crippling long-term economic growth. Food aid will continue to be critical in allowing Bangladesh to stabilize domestic food grain prices and improve its food security.

India

Indian cereal production fell an estimated 8 percent in 1982/83, the second major drought-induced decline in 4 years. Rice production fell 10 percent and coarse grain production 7 percent, more than offsetting the record 1982/83 wheat crop. The production shortfall led to reduced rice procurement and more demand for rice and wheat through the public distribution system. With stocks still low despite some rebuilding by wheat imports in 1981/82, the Government imported an additional 4 million tons of wheat to help meet distribution requirements and augment buffer stocks. Further improvement in the Government's overall stock position is estimated to have occurred in 1982/83, but rice stocks are precariously low following increased allocations to the public distribution system in 1981 and 1982. Total cereal stocks will be 3 million to 4 million tons below target by July 1983, resulting in continued vulnerability to production and procurement shortfalls.

Production of pulses increased nearly 7 percent in 1982/83 because of good winter rains, leading to some improvement in per capita availability over the previous year. Per capita availability of this important source of vegetarian protein, however, continues a downward trend. Output of vegetable oils, following record production the previous year, fell an estimated 8 percent in 1983, largely because of poor weather in groundnut-producing areas. Edible oil imports could rise to over 1.3 million tons in 1983, after falling in 1982 to 915,000 tons, the lowest level since 1976.

Assuming an average monsoon, Indian cereal production is expected to rebound by about 12 percent in 1983/84. As a result of near-normal rainfall and ample input supplies, wheat production is expected to maintain its strong upward trend and achieve a new record. The fall 1983 harvests of rice and coarse grains are projected at trend. This level of output would result in a 3-million-ton surplus of cereals over the status quo estimate of total use. However, the level of per

capita cereal consumption (161 kilograms) in the status quo estimate is biased downward by 2 years of drought-induced declines in availability during the 1979/80-1982/83 base period. Nutrition-based estimates indicate that 182 kilograms of cereals per capita are necessary to achieve the recommended minimum caloric intake, and that 9.8 million tons of cereal imports are required. The stock adjustment calculation for cereals reflects the relatively low level of Government stocks by indicating that stocks need to be built up by about 1.5 million tons. This stock adjustment reduces the cereal surplus derived from status quo estimates to 1.6 million tons, and increases the nutrition-based deficit to 11.3 million tons.

The 1983/84 pulse crop is also expected to benefit from normal winter rains and to reach about 12 million tons. As in the case of cereals, the status quo calculation of per capita pulse use (15 kilograms) is biased downward by drought-induced declines in consumption during the base period, and results in an estimated surplus of pulses in 1983/84. By contrast, nutrition-based estimates indicate that 20 kilograms of pulses per capita, and 2.7 million tons of imports, are required. The status quo total use estimate supports consumption at only 77 percent of the caloric intake target. Current forecasts suggest that the 1983/84 oilseed harvests will support an increase in edible oil output to 3.2 million tons. The status quo estimate sets import requirements at 1.2 million tons, consistent with average annual imports in recent years. Nutrition-based estimates suggest smaller import needs because the base period used to determine dietary shares in the calculation predates India's large-scale imports.

India's balance of payments position will remain very tight over the next several years as the Government attempts to lessen troublesome trade and current account deficits by substituting for imports and promoting exports. Despite substantial drafts from an IMF Extended Fund Facility, foreign reserves are well below levels of the late 1970's. Current estimates reflect some success in reducing trade deficits, and a gradual improvement in import capacity in 1983/84 and 1984/85. Should the adjustment efforts fail, however, India's balance-of-payments situation will be very precarious following the planned termination of IMF assistance in mid-1984.

With the surplus of cereals and pulses estimated using the status quo approach, India's forecast commercial import capacity is sufficient to cover all 1983/84 status quo import requirements, including stock adjustments. Commercial import capacity would, however, be sufficient to finance only 35 percent of the $2.4 billion worth of cereals and pulses required to meet the FAO recommended caloric intake.

Nepal

Nepal's food supply situation varies markedly by region. The Tarai and Kathmandu Valley regions, where most farm production occurs, are normally food-surplus areas, while the hill regions are chronic deficit areas. Distribution of food to the hill

regions is hindered by the extremely rough terrain, however, as well as by the limited food purchasing power of the inhabitants. While available data suggest that Nepal is a small net exporter of food in recent years, information on the actual level of border trade with India is unreliable. Nepal's per capita food production is estimated to have declined steadily in recent years because of poor weather and only marginal growth in farm productivity.

Cereal production may have declined nearly 5 percent in 1982/83, largely because poor rainfall cut rice output, and per capita cereal availability declined from 176 kilograms in 1981/82 to 165 kilograms in 1982/83. More normal weather is expected to lead to about a 3-percent increase in cereal output in 1983/84. The status quo-based calculation suggests a surplus of cereals in Nepal in 1983/84, but it is biased downward by recent declines in per capita availabilities and supports consumption at only 76 percent of the recommended daily minimum caloric intake. The nutrition-based calculation calls for cereal imports of 854,000 tons. While the nutrition-based import requirement calculation does not provide a reliable estimate of actual import needs in light of transportation and distribution obstacles, it does reflect the severe nutritional inadequacy of average Nepalese diets.

Nepal has no capacity to import food on commercial terms with convertible foreign currencies. Approximately 85 percent of the country's foreign trade is conducted with India in Indian rupees, a nonconvertible currency. Any cereal imports from suppliers other than India would have to be on a concessional basis.

Pakistan

Steady and substantial gains in the production of cereals, particularly wheat, have enabled Pakistan to approach self-sufficiency in recent years. Wheat imports have been reduced substantially, and rice exports, exclusively of high-quality Basmati rice, have averaged 1 million tons a year. Aggregate cereal production increased an estimated 4.3 percent in 1982/83 as a result of record rice and wheat harvests. Pakistan's only cereal imports in 1982/83, as in 1981/82, were an estimated 100,000 tons of wheat imported through the World Food Program to help feed approximately 3 million Afghan refugees now living in Pakistan.

Production of cereals is expected to increase 3.2 percent in 1983/84, largely because of an expected fifth consecutive record wheat crop. By both status quo- and nutrition-based standards, 1983/84 domestic cereal production will meet requirements without imports. However, these estimates of cereal requirements do not include additional food needs of the Afghan refugee population. An additional 500,000 tons of cereals would be necessary to provide the refugees with a status quo level of per capita availability, and an additional 630,000 tons would be required to meet the nutrition-based intake level.

Pakistan's production of pulses improved marginally in 1982/83, but both production and per capita availability of pulses maintained the downward trend of recent years. Per capita production is likely to continue to decline in 1983.

Vegetable oil production also increased only marginally in 1982/83, raising imports again, this time to a record 500,000 tons. Some improvement in edible oil production, primarily from cottonseed and rapeseed, is expected in 1983/84 as the Government attempts to reduce import needs.

Pakistan's capacity to import food commercially is expected to decline in 1983/84. Its balance-of-payments position has deteriorated because of rising import bills and declining earnings from cotton and rice exports. Record trade deficits have been partially offset by worker remittances, but foreign exchange reserves have declined and debt obligations have increased markedly. Because of the projected gains in cereal output, however, Pakistan's estimated $528 million commercial food import capacity is sufficient to meet both status quo and nutrition-based import requirements in 1983/84, even when the wheat requirements of Afghan refugees are taken into account.

Sri Lanka

Despite substantial rice production gains which have reduced cereal imports in recent years, Sri Lanka remains dependent on imports for nearly 50 percent of its cereal supplies. Rice production remains susceptible to the vagaries of weather, and climatic conditions prevent wheat cultivation. Poor weather cut rice production 10 percent in 1982/83. To make up the shortfall, stocks were reduced. However, with favorable weather, rice output is expected to rebound substantially in 1983/84. Status quo estimates set cereal import requirements at 783,000 tons for 1983/84; the status quo level of cereal consumption supports 89 percent of the minimum recommended caloric intake. The nutrition-based import requirement estimate is 1.09 million tons. Because of the drawdown of cereal stocks in 1982/83, Sri Lanka's food security position is poor. The stock adjustment calculation suggests that an additional 50,000 tons of cereal imports are necessary for stock building.

Sri Lanka is a traditional exporter of coconut oil. Despite the lack of significant growth in production in recent years, domestic supplies are estimated to be sufficient to meet both status quo- and nutrition-based levels of consumption.

Sri Lanka's balance-of-payments position is precarious. Large increases in the cost of petroleum and capital goods imports, coupled with little growth in earnings from exports of tea, rubber, and coconut products, have resulted in serious current account deficits. Foreign reserve holdings have declined, and the nominal increases in aid flows have been largely absorbed by a sharp rise in debt repayment obligations.

Table 40.--South Asia basic food data

Country/commodity	Actual or forecast production	Actual or targeted beginning stocks	Net imports	Use: Nonfeed use	Use: Feed use	Use: Total use	Actual or targeted ending stocks	Actual or forecast population	Per capita nonfeed use	Commodities covered and share of daily per capita caloric intake: Commodity	Percent
	1,000 tons							Thousands	Kilos		
Afghanistan											
Wheat										Wheat	53.1
1979/80-1982/83	2,200	0	163	2,363	0	2,363	0	14,150	167	Rice	7.0
1982/83 prel.	2,200	0	0	2,200	0	2,200	0	13,600	162	Corn	16.7
1983/84 est.	2,200	0	--	--	0	--	0	13,800	--	Total	76.8
1984/85 est.	2,200	0	--	--	0	--	0	14,000	--		
Other cereals											
1979/80-1982/83	989	0	0	989	0	989	0	14,150	70		
1982/83 prel.	947	0	0	947	0	947	0	13,600	70		
1983/84 est.	947	0	--	--	0	--	0	13,800	--		
1984/85 est.	947	0	--	--	0	--	0	14,000	--		
Bangladesh											
Rice										Wheat	11.9
1979/80-1982/83	13,553	365	393	13,914	0	13,914	400	92,214	151	Rice	72.9
1982/83 prel.	13,958	338	336	14,401	0	14,401	231	93,879	153	Total vegetable oils	2.3
1983/84 est.	14,500	231	--	--	0	--	231	96,300	--	Total	87.1
1984/85 est.	14,900	231	--	--	0	--	231	98,824	--		
Wheat											
1979/80-1982/83	952	341	1,494	2,323	0	2,323	421	92,214	25		
1982/83 prel.	1,094	244	1,870	2,611	0	2,611	597	93,879	28		
1983/84 est.	1,200	597	--	--	0	--	597	96,300	--		
1984/85 est.	1,400	597	--	--	0	--	597	98,824	--		
Vegetable oils											
1979/80-1982/83	69	36	88	158	0	158	27	92,214	2		
1982/83 prel.	70	43	120	193	0	193	40	93,879	2		
1983/84 est.	72	40	--	--	0	--	40	96,300	--		
1984/85 est.	72	40	--	--	0	--	40	98,824	--		
India											
Rice										Wheat	17.6
1979/80-1982/83	48,639	5,274	-540	49,260	275	49,535	3,838	700,045	70	Rice	30.5
1982/83 prel.	45,000	3,098	-245	44,703	250	44,953	2,900	723,054	62	Corn	3.3
1983/84 est.	54,500	2,900	--	--	289	--	2,900	735,600	--	Sorghum	6.2
1984/85 est.	55,500	2,900	--	--	297	--	2,900	754,480	--	Millet	5.9
										Barley	1.1
										Total vegetable oils	5.9
										Pulses	7.8
										Total	78.2
Wheat											
1979/80-1982/83	35,370	4,721	1,329	36,326	325	36,651	4,769	700,045	52		
1982/83 prel.	37,833	4,188	3,800	39,021	300	39,321	6,500	723,054	54		
1983/84 est.	39,000	6,500	--	--	343	--	6,500	735,600	--		
1984/85 est.	40,500	6,500	--	--	351	--	6,500	754,480	--		
Other cereals											
1979/80-1982/83	28,704	1,963	-13	27,370	1,670	29,040	1,613	700,045	39		
1982/83 prel.	28,412	1,700	5	26,997	1,720	28,717	1,400	723,054	37		
1983/84 est.	30,650	1,400	--	--	1,753	--	1,400	735,600	--		
1984/85 est.	31,350	1,400	--	--	1,798	--	1,400	754,480	--		
Pulses											
1979/80-1982/83	10,683	0	71	10,605	150	10,755	0	700,045	15		
1982/83 prel.	11,351	0	50	11,301	100	11,401	0	723,054	16		
1983/84 est.	12,000	0	--	--	159	--	0	735,600	--		
1984/85 est.	12,500	0	--	--	163	--	0	754,480	--		
Vegetable oils											
1979/80-1982/83	2,953	185	1,233	4,199	0	4,199	173	700,045	6		
1982/83 prel.	3,133	180	1,325	4,458	0	4,458	180	723,054	6		
1983/84 est.	3,200	180	--	--	0	--	180	735,600	--		
1984/85 est.	3,300	180	--	--	0	--	180	754,480	--		

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Table 40.--South Asia basic food data--continued

Country/commodity	Actual or forecast production	Actual or targeted beginning stocks	Net imports	Use: Nonfeed use	Use: Feed use	Use: Total use	Actual or targeted ending stocks	Actual or forecast population	Per capita nonfeed use	Commodities covered and share of daily per capita caloric intake: Commodity	Percent
	1,000 tons							Thousands	Kilos		
Nepal											
Rice										Wheat	9.0
1979/80-1982/83	1,365	0	-26	1,339	0	1,339	0	15,530	86	Rice	51.4
1982/83 prel.	1,260	0	0	1,260	0	1,260	0	16,099	78	Corn	20.1
1983/84 est.	1,300	0	--	--	0	--	0	16,490	--	Total	80.4
1984/85 est.	1,350	0	--	--	0	--	0	16,888	--		
Other cereals											
1979/80-1982/83	1,209	0	15	1,223	0	1,223	0	15,530	79		
1982/83 prel.	1,400	0	0	1,400	0	1,400	0	16,099	87		
1983/84 est.	1,435	0	--	--	0	--	0	16,490	--		
1984/85 est.	1,460	0	--	--	0	--	0	16,888	--		
Pakistan											
Wheat										Wheat	46.3
1979/80-1982/83	10,802	950	269	11,133	0	11,133	888	85,900	130	Rice	11.1
1982/83 prel.	11,500	902	100	11,600	0	11,600	902	89,732	129	Corn	2.7
1983/84 est.	12,000	902	--	--	0	--	902	92,414	--	Total vegetable oils	5.1
1984/85 est.	13,000	902	--	--	0	--	902	95,177	--	Pulses	2.8
										Total	68.1
Other cereals											
1979/80-1982/83	4,149	373	-1,024	3,028	130	3,158	340	85,900	35		
1982/83 prel.	4,306	386	-1,000	3,176	130	3,306	386	89,732	35		
1983/84 est.	4,320	386	--	--	140	--	386	92,414	--		
1984/85 est.	4,370	386	--	--	144	--	386	95,177	--		
Pulses											
1979/80-1982/83	483	0	0	438	46	483	0	85,900	5		
1982/83 prel.	550	0	0	498	52	550	0	89,732	6		
1983/84 est.	560	0	--	--	49	--	0	92,414	--		
1984/85 est.	565	0	--	--	50	--	0	95,177	--		
Vegetable oils											
1979/80-1982/83	242	67	434	671	0	671	72	85,900	8		
1982/83 prel.	260	68	500	760	0	760	68	89,732	8		
1983/84 est.	278	68	--	--	0	--	68	92,414	--		
1984/85 est.	290	68	--	--	0	--	68	95,177	--		
Sri Lanka											
Rice										Wheat	18.2
1979/80-1982/83	1,406	195	174	1,602	0	1,602	173	15,319	105	Rice	42.1
1982/83 prel.	1,360	260	100	1,560	0	1,560	160	15,756	99	Cassava	3.6
1983/84 est.	1,564	160	--	--	0	--	160	16,056	--	Total vegetable oils	2.7
1984/85 est.	1,600	160	--	--	0	--	160	16,362	--	Total	66.5
Wheat											
1979/80-1982/83	0	0	668	668	0	668	0	15,319	44		
1982/83 prel.	0	0	650	650	0	650	0	15,756	41		
1983/84 est.	0	0	--	--	0	--	0	16,056	--		
1984/85 est.	0	0	--	--	0	--	0	16,362	--		
Roots and tubers											
1979/80-1982/83	396	0	0	396	0	396	0	15,319	26		
1982/83 prel.	450	0	0	450	0	450	0	15,756	29		
1983/84 est.	500	0	--	--	0	--	0	16,056	--		
1984/85 est.	520	0	--	--	0	--	0	16,362	--		
Vegetable oils											
1979/80-1982/83	83	0	-19	63	0	63	0	15,319	4		
1982/83 prel.	87	0	-20	67	0	67	0	15,756	4		
1983/84 est.	90	0	--	--	0	--	0	16,056	--		
1984/85 est.	95	0	--	--	0	--	0	16,362	--		

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Table 40.--South Asia basic food data--continued

Country/commodity	Actual or forecast production	Actual or targeted beginning stocks	Net imports	Use: Nonfeed use	Use: Feed use	Use: Total use	Actual or targeted ending stocks	Actual or forecast population	Per capita nonfeed use	Commodities covered and share of daily per capita caloric intake: Commodity	Commodities covered and share of daily per capita caloric intake: Percent
	1,000 tons							Thousands	Kilos		
South Asia, total											
Rice											
1979/80-1982/83	68,438	6,207	-1,023	68,599	275	68,874	4,751	--	--		
1982/83 prel.	65,175	4,082	-809	64,521	250	64,771	3,677	--	--		
1983/84 est.	75,471	3,677	--	--	289	--	3,677	--	--		
1984/85 est.	76,997	3,677	--	--	297	--	3,677	--	--		
Wheat											
1979/80-1982/83	49,820	6,012	3,936	53,323	325	53,648	6,078	--	--		
1982/83 prel.	53,227	5,334	6,420	56,682	300	56,982	7,999	--	--		
1983/84 est.	55,010	7,999	--	--	343	--	7,999	--	--		
1984/85 est.	57,720	7,999	--	--	351	--	7,999	--	--		
Other cereals											
1979/80-1982/83	31,078	1,963	-13	29,614	1,800	31,414	1,613	--	--		
1982/83 prel.	30,868	1,700	5	29,323	1,850	31,173	1,400	--	--		
1983/84 est.	33,135	1,400	--	--	1,893	--	1,400	--	--		
1984/85 est.	33,860	1,400	--	--	1,942	--	1,400	--	--		
Roots and tubers											
1979/80-1982/83	396	0	0	396	0	396	0	--	--		
1982/83 prel.	450	0	0	450	0	450	0	--	--		
1983/84 est.	500	0	--	--	0	--	0	--	--		
1984/85 est.	520	0	--	--	0	--	0	--	--		
Pulses											
1979/80-1982/83	11,167	0	71	11,042	196	11,238	0	--	--		
1982/83 prel.	11,901	0	50	11,799	152	11,951	0	--	--		
1983/84 est.	12,560	0	--	--	207	--	0	--	--		
1984/85 est.	13,065	0	--	--	213	--	0	--	--		
Vegetable oils											
1979/80-1982/83	3,346	288	1,735	5,091	0	5,091	271	--	--		
1982/83 prel.	3,550	291	1,925	5,478	0	5,478	288	--	--		
1983/84 est.	3,640	288	--	--	0	--	288	--	--		
1984/85 est.	3,757	288	--	--	0	--	288	--	--		

-- Not applicable.

Table 41.--South Asia food requirements, import requirements, and food aid needs to support consumption, status quo- and nutrition-based estimates

Country/ commodity	Forecast domestic production	Total use 1/		Import requirements				Commercial import capacity		Food aid needs			
				Quantity		Value				Quantity		Value	
		Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based			Status quo	Nutrit. based	Status quo	Nutrit. based
	---1,000 tons---					Million dollars		1,000 tons	Million dollars	1,000 tons		Million dollars	
Afghanistan													
Wheat													
1983/84	2,200	2,305	2,384	105	184	--	--	--	--	--	--	--	--
1984/85	2,200	2,338	2,416	138	216	--	--	--	--	--	--	--	--
Other cereals													
1983/84	947	967	907	20	-40	--	--	--	--	--	--	--	--
1984/85	947	981	919	34	-28	--	--	--	--	--	--	--	--
Total 2/													
1983/84	--	--	--	125	144	41	48	24	8	101	121	34	40
1984/85	--	--	--	172	189	60	65	20	7	152	169	53	58
Bangladesh													
Rice													
1983/84	14,500	14,530	18,716	30	4,216	--	--	--	--	--	--	--	--
1984/85	14,900	14,910	19,211	10	4,311	--	--	--	--	--	--	--	--
Wheat													
1983/84	1,200	2,426	3,115	1,226	1,915	--	--	--	--	--	--	--	--
1984/85	1,400	2,490	3,218	1,090	1,818	--	--	--	--	--	--	--	--
Total above 2/													
1983/84	--	--	--	1,256	6,132	270	1,318	63	14	3/1,085	3/6,045	3/233	3/1,300
1984/85	--	--	--	1,100	6,130	246	1,373	54	12	3/1,002	6,076	3/224	1,361
Vegetable oils													
1983/84	72	164	199	92	127	48	66	137	71	0	0	0	0
1984/85	72	169	205	97	133	53	72	115	63	0	18	0	10
Total													
1983/84	--	--	--	--	--	318	1,384	--	84	--	--	233	1,300
1984/85	--	--	--	--	--	299	1,445	--	75	--	--	224	1,371
India													
Rice													
1983/84	54,500	52,083	56,615	-2,417	2,115	--	--	--	--	--	--	--	--
1984/85	55,500	53,419	58,021	-2,081	2,521	--	--	--	--	--	--	--	--
Wheat													
1983/84	39,000	38,498	39,903	-502	903	--	--	--	--	--	--	--	--
1984/85	40,500	39,486	41,004	-1,014	504	--	--	--	--	--	--	--	--
Other cereals													
1983/84	30,650	30,526	37,436	-124	6,786	--	--	--	--	--	--	--	--
1984/85	31,350	31,309	38,388	-41	7,038	--	--	--	--	--	--	--	--
Total above 2/													
1983/84	--	--	--	0	9,805	0	2,108	762	164	0	3/8,239	0	3/1,771
1984/85	--	--	--	0	10,063	0	2,254	868	194	0	3/8,024	0	3/1,797
Pulses													
1983/84	12,000	11,310	14,731	0	2,731	0	652	107	25	0	2,624	0	626
1984/85	12,500	11,600	15,129	0	2,629	0	813	98	30	0	2,531	0	783
Vegetable oils													
1983/84	3,200	4,409	4,126	1,209	926	621	476	1,262	648	0	0	0	0
1984/85	3,300	4,523	4,233	1,223	933	664	507	1,416	769	0	0	0	0
Total													
1983/84	--	--	--	--	--	621	3,235	--	838	--	--	0	2,398
1984/85	--	--	--	--	--	664	3,574	--	994	--	--	0	2,580

Continued--

Table 41.--South Asia food requirements, import requirements, and food aid needs to support consumption, status quo- and nutrition-based estimates--continued

Country/ commodity	Forecast domestic production	Total use 1/		Import requirements				Commercial import capacity		Food aid needs			
				Quantity		Value				Quantity		Value	
		Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based			Status quo	Nutrit. based	Status quo	Nutrit. based
	1,000 tons					Million dollars		1,000 tons	Million dollars	1,000 tons		Million dollars	
Nepal													
Rice													
1983/84	1,300	1,423	2,113	123	813	--	--	--	--	--	--	--	--
1984/85	1,350	1,457	2,167	107	817	--	--	--	--	--	--	--	--
Other cereals													
1983/84	1,435	1,295	1,476	-140	41	--	--	--	--	--	--	--	--
1984/85	1,460	1,326	1,509	-134	49	--	--	--	--	--	--	--	--
Total 2/													
1983/84	--	--	--	0	854	0	226	0	0	0	854	0	226
1984/85	--	--	--	0	866	0	237	0	0	0	866	0	237
Pakistan													
Wheat													
1983/84	12,000	11,982	12,525	-18	525	--	--	--	--	--	--	--	--
1984/85	13,000	12,340	12,950	-660	-50	--	--	--	--	--	--	--	--
Other cereals													
1983/84	4,320	3,400	3,644	-920	-676	--	--	--	--	--	--	--	--
1984/85	4,370	3,501	3,745	-869	-625	--	--	--	--	--	--	--	--
Total above 2/													
1983/84	--	--	--	0	0	0	0	1,059	187	0	0	0	0
1984/85	--	--	--	0	0	0	0	1,171	216	0	0	0	0
Pulses													
1983/84	560	519	727	0	167	0	64	13	5	0	4/0	0	4/0
1984/85	565	535	748	0	183	0	90	12	6	0	4/0	0	4/0
Vegetable oils													
1983/84	278	720	500	442	222	221	111	673	336	0	0	0	0
1984/85	290	742	515	452	225	239	119	733	388	0	0	0	0
Total													
1983/84	--	--	--	--	--	221	174	--	528	--	--	0	0
1984/85	--	--	--	--	--	239	209	--	609	--	--	0	0
Sri Lanka													
Rice													
1983/84	1,564	1,680	1,690	116	126	--	--	--	--	--	--	--	--
1984/85	1,600	1,712	1,723	112	123	--	--	--	--	--	--	--	--
Wheat													
1983/84	0	701	919	701	919	--	--	--	--	--	--	--	--
1984/85	0	714	937	714	937	--	--	--	--	--	--	--	--
Roots and tubers													
1983/84	500	414	615	-86	115	--	--	--	--	--	--	--	--
1984/85	520	422	630	-98	110	--	--	--	--	--	--	--	--
Total above 2/													
1983/84	--	--	--	783	1,090	155	216	683	135	3/83	3/390	3/16	3/77
1984/85	--	--	--	788	1,102	163	227	670	138	3/101	3/416	3/21	3/86
Vegetable oils													
1983/84	90	66	46	0	0	0	0	6	3	0	0	0	0
1984/85	95	68	46	0	0	0	0	6	3	0	0	0	0
Total													
1983/84	--	--	--	--	--	155	216	--	138	--	--	16	77
1984/85	--	--	--	--	--	163	227	--	142	--	--	21	86

Continued--

Table 41.--South Asia food requirements, import requirements, and food aid needs to support consumption, status quo- and nutrition-based estimates--continued

Country/ commodity	Forecast domestic production	Total use 1/		Import requirements				Commercial import capacity		Food aid needs			
				Quantity		Value				Quantity		Value	
		Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based			Status quo	Nutrit. based	Status quo	Nutrit. based
		1,000 tons				Million dollars		1,000 tons	Million dollars	1,000 tons		Million dollars	
South Asia, total													
Total, major cereals and roots and tubers 2/													
1983/84	--	--	--	2,164	18,024	466	3,916	--	--	1,270	15,647	283	3,414
1984/85	--	--	--	2,060	18,350	469	4,157	--	--	1,256	15,550	298	3,540
Pulses													
1983/84	--	--	--	0	2,898	0	715	--	--	0	2,624	0	626
1984/85	--	--	--	0	2,812	0	903	--	--	0	2,531	0	783
Vegetable oils													
1983/84	--	--	--	1,744	1,275	890	652	--	--	0	0	0	0
1984/85	--	--	--	1,771	1,291	956	698	--	--	0	18	0	10
Total													
1983/84	--	--	--	--	--	1,356	5,283	--	--	--	--	283	4,041
1984/85	--	--	--	--	--	1,424	5,758	--	--	--	--	298	4,332

1/ The sum of targeted nonfeed and feed use.
2/ Cereal equivalent.
3/ Surplus vegetable oil capacity partially offsets cereal aid needs.
4/ Surplus cereal and vegetable oil capacity offsets pulse aid needs.
-- Not applicable.

Table 42.--Summary of South Asia cereal import requirements and food aid needs to support consumption, status quo- and nutrition-based estimates

Country	1982/83 imports	1983/84 import requirements		1983/84 aid needs	
		Status quo	Nutrit. based	Status quo	Nutrit. based
	1,000 tons				
Afghanistan	0	125	144	101	121
Bangladesh	2,206	1,256	6,132	1,085	6,045
India	3,560	0	9,805	0	8,239
Nepal	0	0	854	0	854
Pakistan	-900	0	0	0	0
Sri Lanka	750	783	1,090	83	390
South Asia, total	5,616	2,164	18,024	1,270	15,647

Table 43.--South Asia financial indicators, actual and projected

Country and year	International reserves yearend	Exports (f.o.b.)	Imports (f.o.b.)	Debt service due	1983 and 1984 conditions as of April 1983
	Million dollars				
Afghanistan					
1979-82	347	640	421	NA	Afghanistan's economic situation has been severely disrupted by the Soviet incursion in 1980. Total exports and imports with the free world have declined sharply. Available historical financial data indicate that total reserves are likely to amount to close to $300 million through FY 1984, well below the 1979 level. Given the political-economic situation, exports and imports are expected to remain low.
1982 prel.	300	720	550	NA	
1983 est.	300	750	650	NA	
1984 est.	300	770	750	NA	
Bangladesh					
1979-82	249	754	2,228	99	Exports decreased slightly in dollars because of a 23-percent currency depreciation. Imports increased slightly in domestic currency but declined 16 percent in dollars. Demand for jute products may increase with a worldwide recovery, but export gains will probably be modest through 1984.
1982 prel.	170	775	2,400	136	
1983 est.	160	790	2,350	175	
1984 est.	160	815	2,650	225	
India					
1979-82	5,837	8,499	12,680	1,091	Slow export growth coupled with a sharp increase in the import bill in 1980 and 1981, primarily from higher oil prices, have led to unmanageable trade and current account deficits. The IMF, with the provision of a 3-year, SDR 5-billion, extended fund facility begun in 1981, is assisting India with an adjustment program of import substitution, export expansion, and more reliance on private foreign investment and commercial borrowing. Lower oil prices will help ease the trade deficits.
1982 prel.	4,280	9,400	14,200	1,250	
1983 est.	4,600	10,600	15,400	1,350	
1984 est.	5,100	12,100	16,900	1,400	
Nepal					
1979-82	190	114	311	4	
1982 prel.	220	120	380	5	NA
1983 est.	200	150	440	6	
1984 est.	200	170	500	7	
Pakistan					
1979-82	508	3,316	5,474	590	A 25-percent devaluation during 1982 led exports to drop by a similar percent in dollars. Cotton and rice exports declined even faster. Worker remittances, which will probably increase more slowly through 1984 than in the late 1970's, will help finance the current account deficit.
1982 prel.	600	3,950	6,500	700	
1983 est.	500	4,600	7,400	800	
1984 est.	500	5,375	8,700	900	
Sri Lanka					
1979-82	348	1,046	1,694	100	Exports in 1982 were about the same as in 1981, as tea, coconut products, and rubber exports roughly maintained 1981 levels despite weakened world economic conditions. Imports increased slightly in 1982. Commercial borrowing increased to cover rising imports, and debt-service payments have risen rapidly.
1982 prel.	302	1,080	1,930	150	
1983 est.	300	1,200	2,140	170	
1984 est.	300	1,300	2,380	200	
South Asia, total					
1979-82	7,477	14,369	22,807	1,883	
1982 prel.	5,872	16,045	25,960	2,241	
1983 est.	6,060	18,090	28,380	2,501	
1984 est.	6,560	20,530	31,880	2,732	

NA = Not available.

Table 44.--South Asia import requirements and aid needs to support cereal stock adjustments 1/

Country	Estimated stock increment		Import requirements				Aid needs			
			Quantity		Value		Quantity		Value	
	Quantity	Value	Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based
	1,000 tons	Million dollars	1,000 tons		Million dollars		1,000 tons		Million dollars	
Bangladesh										
Cereals										
1983/84	171	37	1,427	6,302	307	1,355	1363	6239	293	1341
1984/85	26	6	1,126	6,156	252	1,379	1073	6102	240	1367
Total										
1983/84	--	37	--	--	354	1,421	--	--	270	1336
1984/85	--	6	--	--	305	1,451	--	--	230	1376
India										
Cereals										
1983/84	1,465	315	-1,578	11,270	-339	2,423	0	10508	0	2259
1984/85	315	71	-2,820	10,378	-632	2,325	0	9510	0	2130
Total										
1983/84	--	315	--	--	117	3,551	--	--	0	2713
1984/85	--	71	--	--	-246	3,644	--	--	0	2651
Pakistan										
Cereals										
1983/84	110	19	-828	-40	-146	-7	0	0	0	0
1984/85	90	17	-1,439	-586	-265	-108	0	0	0	0
Total										
1983/84	--	19	--	--	59	167	--	--	0	0
1984/85	--	17	--	--	-41	101	--	--	0	0
Sri Lanka										
Cereals										
1983/84	50	10	833	1,140	165	226	150	457	30	90
1984/85	4	1	792	1,106	163	228	121	436	25	90
Total										
1983/84	--	10	--	--	152	200	--	--	13	62
1984/85	--	1	--	--	147	199	--	--	5	58

1/ Includes only countries for which cereal stock data are available.
-- Not applicable.

SOUTHEAST ASIA SUBREGION

In Southeast Asia, rice dominates the average diet; wheat and other cereals are rarely used to fill rice deficits. Helped by higher yields and increased planted area, the 1982/83 milled rice output for the region is estimated at a record 39.3 million tons, a 5-percent boost over 1981/82. Output may fall to about 38 million tons in 1983/84, primarily because of drought in Indonesia and an expected return to more normal production levels in the centrally planned economies. Per capita cereal availability in Southeast Asia has remained relatively stable during the 1970's except for Indonesia, which has expanded its rice output dramatically during the past decade. The region continues to have large quantities of palm oil and coconut oil available for export; vegetable oil plays only a small role in the diets of most people in Southeast Asia.

If 1979-82 per capita consumption is to be maintained, Southeast Asian cereal imports will have to reach about 5.0 million tons in 1983/84 and 4.2 million tons in 1984/85. To achieve nutritional minimums each year would require 3.7 and 3.9 million tons, respectively; Indonesia is the only Southeast Asian country above the FAO nutritional minimum. Southeast Asian countries will find it difficult to purchase needed imports, however, due to deteriorating financial conditions. High debt-service payments in the Philippines and declining oil revenues in Indonesia are shrinking the two countries' commercial import capacity. Data on Kampuchea, Laos, and Vietnam are incomplete but suggest that concessional aid will be crucial.

Indonesia

Rice production in 1982/83 increased 4.1 percent in Indonesia. However, overall food output was held at the year-earlier level; mid-December drought in 1982 reduced dry-season production of rice and secondary foods. Nevertheless, per capita nonfeed use of cereals in 1982/83 exceeded that in 1981/82 by 3.6 percent. In recent years, improved crop production--with per capita food production nearly 25 percent ahead of that in the mid-1970's--and large-scale cereal imports of both wheat and rice have allowed the Government to raise average per capita intake above the recommended nutritional minimum. Per capita cereal consumption was 98 percent of the minimum recommended level during 1975-77, up from only 91 percent during 1969-71. Lateness of the wet-season harvest will probably lower overall food production at least 2 percent in 1983/84. Assuming a return to normal weather, food production is forecast to rebound 5 percent in 1984/85.

To maintain per capita consumption at status quo levels, total cereal import requirements are projected at a relatively high 2.3 million tons in 1983/84. However, Indonesia's foreign exchange reserves were $3.1 billion at the beginning of 1983. While this amount is 42 percent less than 2 years earlier--and reserves are still declining--it should provide sufficient commercial import capacity to hold food aid needs to 297,000 tons in 1983/84.

Kampuchea

Primarily because harvested area was larger, Kampuchea's 1982/83 rice production is estimated up 17 percent, to 1.1 million tons. However, we know little about the extent to which normal conditions have been restored in agriculture following the 1978/79 war and resulting internal dislocations. As in Vietnam, the variability of monsoon timing also complicates estimation of agricultural performance. To maintain 1979-82 average per capita consumption, cereal import requirements would be 123,000 tons; under the nutritional minimum, requirements would be 253,000 tons. Abnormally low per capita intake in 1979--with resulting bias in average consumption for 1979-82 --partially explains this wide difference. More adequate per capita consumption during the past 2 years has been achieved largely through concessional imports of rice, mainly from Japan.

Laos

Information on Laos is limited. Rice production is expected to be above average for 1983/84. Because rice accounts for 80 percent of the diet in Laos, no food aid needs are projected for 1983/84. Cereal import requirements for 1983/84 are estimated at 55,000 tons under the status quo calculation and 63,000 tons under the nutritional. But low debt service and the prospect of improved export earnings should provide Laos with the financial resources to import these cereals commercially.

Philippines

Timely rainfall and increased fertilizer use explain food production advances in the Philippines during 1982/83. Total cereal output ran 4.3 percent ahead of the 1979-82 average, allowing some rebuilding of rice stocks and increased feed use. The country continued to be self-sufficient in rice and white corn, while wheat imports rose 5 percent in response to lower prices.

Drought and subsequent flooding in the central and southern portions of the country will likely hamper the 1983/84 rice and corn harvests. Therefore, while some increase in food output is expected during the year, 1983/84 production is expected to be slightly below the long-term trend. As a result, status quo-based cereal import requirements are calculated at 1.1 million tons for 1983/84, with nutrition-based estimates slightly higher at 1.4 million. However, this assumes no drawdown of the Philippines' cereal stocks, forecast at 1.78 million tons at the beginning of 1983/84. Using these large stocks to supplement domestic supplies could lower cereal import requirements and aid needs substantially. Despite the country's export position in vegetable oils, nutritional deficiencies of vegetable oil are believed to exist for many Filipinos.

Because the already-large trade deficit is forecast to increase for 1983/84, and debt-service payments are escalating, the Philippines are trying to minimize foreign exchange expenditures. The Philippines' commercial import capacity is expected to fall between 1982/83 and 1983/84.

Vietnam

Vietnam's 1982/83 rice production is estimated at nearly 9 million tons, 10 percent over 1980/81, because of higher yields. Projecting cereal production is particularly difficult because of the unpredictability of monsoon rainfall, but current forecasts based on normal weather call for 8.4 million and 8.5 million tons for 1983/84 and 1984/85, respectively. While these levels are above trend, both are below the bumper 1982/83 harvest. Status quo estimates suggest that, at the forecast level of production, about 1.4 million and 1.5 million tons of cereal imports would be required to maintain 1979-82 average per capita consumption. Because status quo per capita cereal consumption is only 69 percent of a nutritionally adequate diet, nutrition-based cereal import requirements are higher, totaling 2.0 million tons for 1983/84 and 2.2 million tons for 1984/85.

Vietnam's commercial import capacity is estimated at only 180,000 tons for 1983/84, leaving aid needs at 1.2 million for status quo cereal requirement and 1.8 million for nutrition-based requirements. However, if debt-service obligations fail to decline, food aid needs in 1984/85 will be sharply higher.

Table 45.--Southeast Asia basic food data

Country/commodity	Actual or forecast production	Actual or targeted beginning stocks	Net imports	Use: Nonfeed use	Use: Feed use	Use: Total use	Actual or targeted ending stocks	Actual or forecast population	Per capita nonfeed use	Commodities covered and share of daily per capita caloric intake: Commodity	Percent
	1,000 tons							Thousands	Kilos		
Indonesia											
Rice										Wheat	3.5
1979/80-1982/83	20,878	1,501	1,193	19,756	2,177	21,933	1,639	149,075	132	Rice	52.3
1982/83 prel.	23,191	2,252	332	21,370	2,667	24,037	1,738	154,000	139	Corn	7.4
1983/84 est.	22,500	1,738	--	--	2,287	--	1,738	157,100	--	Cassava	7.6
1984/85 est.	23,700	1,738	--	--	2,335	--	1,738	160,400	--	Coconut oil	5.7
										Palm oil	.5
										Total	77.0
Other cereals											
1979/80-1982/83	3,977	231	1,459	4,807	637	5,443	223	149,075	32		
1982/83 prel.	3,800	234	1,681	4,739	800	5,539	176	154,000	31		
1983/84 est.	4,000	176	--	--	669	--	176	157,100	--		
1984/85 est.	4,150	176	--	--	683	--	176	160,400	--		
Cassava											
1979/80-1982/83	13,440	0	-1,087	12,100	253	12,353	0	149,075	81		
1982/83 prel.	12,982	0	-482	12,300	200	12,500	0	154,000	80		
1983/84 est.	13,000	0	--	--	267	--	0	157,100	--		
1984/85 est.	13,700	0	--	--	272	--	0	160,400	--		
Vegetable oils											
1979/80-1982/83	1,452	49	-373	1,074	0	1,074	54	149,075	7		
1982/83 prel.	1,528	54	-272	1,251	0	1,251	59	154,000	8		
1983/84 est.	1,598	59	--	--	0	--	59	157,100	--		
1984/85 est.	1,684	59	--	--	0	--	59	160,400	--		
Laos											
Rice										Rice	79.7
1979/80-1982/83	670	0	51	720	0	720	0	3,518	205	Total	79.7
1982/83 prel.	650	0	50	700	0	700	0	3,614	194		
1983/84 est.	700	0	--	--	0	--	0	3,686	--		
1984/85 est.	750	0	--	--	0	--	0	3,760	--		
Kampuchea											
Rice										Wheat	2.1
1979/80-1982/83	823	0	121	944	0	944	0	5,820	162	Rice	73.3
1982/83 prel.	1,071	0	50	1,121	0	1,121	0	5,977	188	Corn	4.4
1983/84 est.	900	0	--	--	0	--	0	6,120	--	Total	79.9
1984/85 est.	950	0	--	--	0	--	0	6,267	--		
Other cereals											
1979/80-1982/83	88	0	33	120	0	120	0	5,820	21		
1982/83 prel.	90	0	35	125	0	125	0	5,977	21		
1983/84 est.	95	0	--	--	0	--	0	6,120	--		
1984/85 est.	100	0	--	--	0	--	0	6,267	--		
Philippines											
Rice										Wheat	5.2
1979/80-1982/83	5,192	1,490	-117	4,725	346	5,072	1,494	49,694	95	Rice	39.8
1982/83 prel.	5,385	1,472	-50	4,942	353	5,295	1,512	51,574	96	Corn	12.5
1983/84 est.	5,444	1,512	--	--	368	--	1,512	52,847	--	Cassava	3.4
1984/85 est.	5,500	1,512	--	--	377	--	1,512	54,131	--	Sweet-potatoes	2.6
										Coconut oil	4.4
										Total	67.9
Other cereals											
1979/80-1982/83	3,150	320	1,166	2,649	1,709	4,357	278	49,694	53		
1982/83 prel.	3,076	298	1,340	2,567	1,900	4,467	247	51,574	50		
1983/84 est.	3,480	247	--	--	1,814	--	247	52,847	--		
1984/85 est.	3,575	247	--	--	1,858	--	247	54,131	--		
Roots and tubers											
1979/80-1982/83	2,878	0	0	2,878	0	2,878	0	49,694	58		
1982/83 prel.	2,943	0	0	2,943	0	2,943	0	51,574	57		
1983/84 est.	3,006	0	--	--	0	--	0	52,847	--		
1984/85 est.	3,080	0	--	--	0	--	0	54,131	--		
Vegetable oils											
1979/80-1982/83	1,113	75	-928	188	0	188	72	49,694	4		
1982/83 prel.	1,135	65	-956	180	0	180	64	51,574	3		
1983/84 est.	1,131	64	--	--	0	--	64	52,847	--		
1984/85 est.	977	64	--	--	0	--	64	54,131	--		

Continued--

Table 45.--Southeast Asia basic food data--continued

Country/commodity	Actual or forecast production	Actual or targeted beginning stocks	Net imports	Use: Nonfeed use	Use: Feed use	Use: Total use	Actual or targeted ending stocks	Actual or forecast population	Per capita nonfeed use	Commodities covered and share of daily per capita caloric intake: Commodity	Percent
	1,000 tons							Thousands	Kilos		
Vietnam											
Rice										Wheat	5.4
1979/80-1982/83	7,928	0	101	8,028	0	8,028	0	54,330	148	Rice	67.5
1982/83 prel.	8,957	0	0	8,957	0	8,957	0	56,430	159	Corn	3.3
1983/84 est.	8,400	0	--	--	0	--	0	57,784	--	Total	76.2
1984/85 est.	8,500	0	--	--	0	--	0	59,113	--		
Other cereals											
1979/80-1982/83	498	0	1,160	1,658	0	1,658	0	54,330	31		
1982/83 prel.	475	0	1,110	1,585	0	1,585	0	56,430	28		
1983/84 est.	540	0	--	--	0	--	0	57,784	--		
1984/85 est.	540	0	--	--	0	--	0	59,113	--		
Southeast Asia, total											
Rice											
1979/80-1982/83	35,490	2,991	1,348	34,173	2,523	36,697	3,133	--	--		
1982/83 prel.	39,254	3,724	382	37,090	3,020	40,110	3,250	--	--		
1983/84 est.	37,944	3,250	--	--	2,656	--	3,250	--	--		
1984/85 est.	39,400	3,250	--	--	2,713	--	3,250	--	--		
Other cereals											
1979/80-1982/83	7,711	550	3,817	9,233	2,345	11,578	500	--	--		
1982/83 prel.	7,441	532	4,166	9,016	2,700	11,716	423	--	--		
1983/84 est.	8,115	423	--	--	2,482	--	423	--	--		
1984/85 est.	8,365	423	--	--	2,541	--	423	--	--		
Roots and tubers											
1979/80-1982/83	16,318	0	-1,087	14,978	253	15,231	0	--	--		
1982/83 prel.	15,925	0	-482	15,243	200	15,443	0	--	--		
1983/84 est.	16,006	0	--	--	267	--	0	--	--		
1984/85 est.	16,780	0	--	--	272	--	0	--	--		
Vegetable oils											
1979/80-1982/83	2,565	124	-1,301	1,262	0	1,262	126	--	--		
1982/83 prel.	2,663	119	-1,228	1,431	0	1,431	123	--	--		
1983/84 est.	2,729	123	--	--	0	--	123	--	--		
1984/85 est.	2,661	123	--	--	0	--	123	--	--		

-- Not applicable.

Table 46.--Southeast Asia fooo requirements, import requirements, and food aid needs to support consumption, status quo- and nutrition-based estimates

Country/ commodity	Forecast domestic production	Total use 1/		Import requirements				Commercial import capacity		Food aid needs			
				Quantity		Value				Quantity		Value	
		Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based	1,000 tons	Million dollars	Status quo	Nutrit. based	Status quo	Nutrit. based
	1,000 tons					Million dollars		1,000 tons	Million dollars	1,000 tons		Million dollars	
Indonesia													
Rice													
1983/84	22,500	23,091	20,263	591	-2,237	--	--	--	--	--	--	--	--
1984/85	23,700	23,576	20,740	-124	-2,960	--	--	--	--	--	--	--	--
Other cereals													
1983/84	4,000	5,732	5,293	1,732	1,293	--	--	--	--	--	--	--	--
1984/85	4,150	5,852	5,407	1,702	1,257	--	--	--	--	--	--	--	--
Cassava													
1983/84	13,000	13,018	10,969	18	-2,031	--	--	--	--	--	--	--	--
1984/85	13,700	13,291	11,217	-409	-2,483	--	--	--	--	--	--	--	--
Total above 2/													
1983/84	--	--	--	2,329	0	534	0	1,978	454	3/ 297	0	3/ 68	0
1984/85	--	--	--	1,423	0	340	0	2,097	502	0	0	0	0
Vegetable oils													
1983/84	1,598	1,128	885	0	0	0	0	23	13	0	0	0	0
1984/85	1,684	1,152	904	0	0	0	0	24	14	0	0	0	0
Total													
1983/84	--	--	--	--	--	534	0	--	466	--	--	68	0
1984/85	--	--	--	--	--	340	0	--	515	--	--	0	0
Laos													
Rice													
1983/84	700	755	763	55	63	--	--	--	--	--	--	--	--
1984/85	750	770	784	20	34	--	--	--	--	--	--	--	--
Total 2/													
1983/84	--	--	--	55	63	28	33	66	35	0	0	0	0
1984/85	--	--	--	20	34	11	18	70	38	0	0	0	0
Kampuchea													
Rice													
1983/84	900	992	1,135	92	235	--	--	--	--	--	--	--	--
1984/85	950	1,016	1,166	66	216	--	--	--	--	--	--	--	--
Other cereals													
1983/84	95	126	113	31	18	--	--	--	--	--	--	--	--
1984/85	100	129	116	29	16	--	--	--	--	--	--	--	--
Total 2/													
1983/84	--	--	--	123	253	6	13	29	2	94	224	5	12
1984/85	--	--	--	95	232	5	13	28	2	67	204	4	11
Philippines													
Rice													
1983/84	5,444	5,392	5,380	-52	-64	--	--	--	--	--	--	--	--
1984/85	5,500	5,523	5,505	23	5	--	--	--	--	--	--	--	--
Other cereals													
1983/84	3,480	4,634	4,985	1,154	1,505	--	--	--	--	--	--	--	--
1984/85	3,575	4,747	5,107	1,172	1,532	--	--	--	--	--	--	--	--
Roots and tubers													
1983/84	3,006	3,061	2,802	55	-204	--	--	--	--	--	--	--	--
1984/85	3,080	3,136	2,870	56	-210	--	--	--	--	--	--	--	--
Total above 2/													
1983/84	--	--	--	1,122	1,366	192	234	670	115	3/ 382	3/ 626	3/ 65	3/ 107
1984/85	--	--	--	1,215	1,460	217	261	677	121	3/ 467	3/ 712	3/ 83	3/ 127
Vegetable oils													
1983/84	1,131	200	271	0	0	0	0	23	12	0	0	0	0
1984/85	977	205	269	0	0	0	0	23	13	0	0	0	0
Total													
1983/84	--	--	--	--	--	192	234	--	127	--	--	65	107
1984/85	--	--	--	--	--	217	261	--	133	--	--	83	127

Continued--

Table 46.--Southeast Asia food requirements, import requirements, and food aid needs to support consumption, status quo- and nutrition-based estimates--continued

Country/ commodity	Forecast domestic production	Total use 1/		Import requirements				Commercial import capacity		Food aid needs			
				Quantity		Value				Quantity		Value	
		Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based	1,000 tons	Million dollars	Status quo	Nutrit. based	Status quo	Nutrit. based
	1,000 tons					Million dollars				1,000 tons		Million dollars	
Vietnam													
Rice													
1983/84	8,400	8,525	9,520	125	1,120	--	--	--	--	--	--	--	--
1984/85	8,500	8,721	9,727	221	1,227	--	--	--	--	--	--	--	--
Other cereals													
1983/84	540	1,767	1,438	1,227	898	--	--	--	--	--	--	--	--
1984/85	540	1,808	1,471	1,268	931	--	--	--	--	--	--	--	--
Total 2/													
1983/84	--	--	--	1,352	2,018	213	318	180	28	1,173	1,838	185	289
1984/85	--	--	--	1,489	2,157	245	354	758	124	731	1,399	120	230
Southeast Asia, total													
Total, major cereals and roots and tubers 2/													
1983/84	--	--	--	4,981	3,700	974	598	--	--	1,946	2,688	323	408
1984/85	--	--	--	4,241	3,883	818	646	--	--	1,265	2,316	207	368
Vegetable oils													
1983/84	--	--	--	0	0	0	0	--	--	0	0	0	0
1984/85	--	--	--	0	0	0	0	--	--	0	0	0	0
Total													
1983/84	--	--	--	--	--	974	598	--	--	--	--	323	408
1984/85	--	--	--	--	--	818	646	--	--	--	--	207	368

1/ The sum of targeted nonfeed and feed use.
2/ Cereal equivalent.
3/ Surplus vegetable oil capacity offsets cereal aid needs.
-- Not applicable.

Table 47.--Summary of Southeast Asia cereal import requirements and food aid needs to support consumption, status quo and nutrition-based estimates

Country	1982/83 imports	1983/84 import requirements		1983/84 aid needs	
		Status quo	Nutrit. based	Status quo	Nutrit. based
	1,000 tons				
Indonesia	2,013	2,329	0	297	0
Laos	50	55	63	0	0
Kampuchea	85	123	253	94	224
Philippines	1,190	1,122	1,366	382	626
Vietnam	1,110	1,352	2,018	1,173	1,838
East and Southeast Asia, Total	4,448	4,981	3,700	1,946	2,688

Table 48.--Southeast Asia financial indicators, actual and projected

Country and year	International reserves yearend	Exports (f.o.b.)	Imports (f.o.b.)	Debt service due	1983 and 1984 conditions as of April 1983
		Million dollars			
Indonesia					
1979-82	4,403	20,008	14,943	2,077	Low world demand reduced overall export earnings by roughly 14 percent in 1982. Reduced prices for oil in 1983 could cause further decline in exports. Imports may grow only slowly during 1983 and 1984 if export earnings remain sluggish.
1982 prel.	3,144	20,000	21,000	2,462	
1983 est.	3,000	21,500	20,000	2,717	
1984 est.	3,000	24,000	22,000	2,947	
Laos					
1979-82	17	25	93	4	Trade deficits will likely increase even though exports are projected to increase faster than imports.
1982 prel.	12	48	121	3	
1983 est.	10	50	125	3	
1984 est.	10	55	135	3	
Kampuchea					
1979-82	NA	NA	NA	NA	There is no information available on the magnitude of foreign exchange levels. Most vital statistics became unavailable after 1973.
1982 prel.	NA	NA	NA	NA	
1983 est.	NA	NA	NA	NA	
1984 est.	NA	NA	NA	NA	
Philippines					
1979-82	2,593	5,352	7,420	1,720	Declining demand for coconut products, copper, and sugar, together with an 8-percent devaluation of peso, caused exports in dollars to drop by 12 percent in 1982. Imports also declined in dollars because of the devaluation, while increasing only slightly in pesos. Export and import growth will likely be slow through 1984.
1982 prel.	2,568	5,295	7,863	2,230	
1983 est.	2,500	5,480	8,120	2,480	
1984 est.	2,500	5,670	8,345	2,450	
Vietnam					
1979-82	92	306	867	212	The trade deficit will likely remain twice the size of exports. Debt-service payments will probably remain very high, and reserves could drop substantially.
1982 prel.	45	300	900	237	
1983 est.	40	310	945	232	
1984 est.	40	325	990	181	
Southeast Asia, total					
1979-82	7,104	25,691	23,323	4,012	
1982 prel.	5,769	25,643	29,884	4,932	
1983 est.	5,550	27,340	29,190	5,432	
1984 est.	5,550	30,050	31,470	5,581	

NA = Not available.

Table 49.--East and Southeast Asia import requirements and aid needs to support consumption and cereal stock adjustments 1/

Country	Estimated stock increment		Import requirements				Aid needs			
			Quantity		Value		Quantity		Value	
	Quantity	Value	Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based
	1,000 tons	Million dollars	1,000 tons		Million dollars		1,000 tons		Million dollars	
Indonesia										
Cereals										
1983/84	-4	-1	2,325	-1,718	533	-394	347	0	80	0
1984/85	255	61	1,678	-2,389	401	-572	0	0	0	0
Total										
1983/84	--	-1	--	--	272	-790	--	--	0	0
1984/85	--	61	--	--	89	-1,030	--	--	0	0
Philippines										
Cereals										
1983/84	77	13	1,199	1,443	205	247	529	773	91	132
1984/85	123	22	1,337	1,583	239	282	661	906	118	162
Total										
1983/84	--	13	--	--	-274	-196	--	--	0	0
1984/85	--	22	--	--	-182	-103	--	--	0	0
Southeast Asia, total										
Cereals										
1983/84	73	12	5,054	2,059	986	217	2,132	0	354	0
1984/85	378	83	4,619	1,616	901	96	991	0	115	0
Total										
1983/84	--	12	--	--	246	-622	--	--	0	0
1984/85	--	83	--	--	167	-748	--	--	0	0

1/ Includes only countries for which cereal stock data are available.
-- Not applicable.

Latin America

CARIBBEAN SUBREGION

Despite localized droughts and heavy rains, which are common in the region and which reduced yields in some instances, harvests were generally good in the Caribbean. The entire area escaped massive natural disasters such as the hurricanes which devastated crops in several countries in 1979 and 1980. Adequate harvests nevertheless failed to reverse a chronic dependence on cereal imports, which comprised 55 percent of total cereal use during 1982/83 in these countries.

Production constraints and disincentives frustrate Jamaica's attempts to escape a well-developed pattern of import dependence. Dwindling reserves and stagnating export earnings make Haiti unable to pay for nearly half of its status quo cereal import needs. Together, these two countries account for virtually all of the subregion's status quo food aid needs and over 80 percent of nutrition-based needs. Despite continued high demand for key cereal imports such as wheat, improved export earnings and lower debt service will enable the Dominican Republic to pay for its imports in 1983/84.

Most Caribbean nations depend on imports of temperate zone products for a substantial portion of basic food supplies besides cereals--items such as powdered milk and cooking oil. Moreover, in 1983/84, the Caribbean countries will need to import the same large proportion of cereal needs as in 1982/83. None of the countries can grow wheat, yet it is now the primary cereal in the region.

The world recession, coupled with declining prices for exports, has forced Caribbean governments to reduce imports to conserve scarce supplies of foreign exchange--which are expected to drop 13 percent by 1983/84. However, failure to offset reduced imports with increased domestic production has put substantialpressure on consumer prices. Export earnings should recover only marginally in 1983/84, while dwindling reserves and higher debt-service payments lower Caribbean countries' ability to finance needed food purchases, raising the area's food aid needs in 1983/84. About one-quarter of Caribbean cereal import requirements in 1983/84 must be purchased on a concessional basis or foregone.

Dominican Republic

In the 1970's, the Dominican Republic's food production increased 35 percent and per capita food produced outran population growth. However, the country's economy still relies heavily on imports to meet consumption needs. Agricultural commodities such as soybeans and corn can be purchased abroad more cheaply than they can be produced at home, and others such as wheat cannot be grown in the tropical climate. Nevertheless, imported wheat has become a dietary staple, along with domestic rice, vegetable oils, and pulses.

The majority of sorghum and other feeds used for the domestic livestock industry is produced locally, restraining somewhat the need for cereal imports. But in 1983/84, the expected 6-percent gain in cereal production will be swallowed up by a 2.6-percent gain in population combined with the need to rebuild pig supplies decimated by the African swine fever program. This will work to keep status quo cereal import requirements near 1982/83 levels.

The financial situation of the country deteriorated in 1982. Export earnings fell at least 25 percent, because of lower world prices and world demand for sugar, coffee, cocoa, cotton, beef, and bauxite. Emergency import controls are being imposed to prevent reserves from falling beyond their already low level of 2 weeks' import coverage. These controls will inevitably stifle much-needed economic growth. Fortunately, export earnings are expected to rebound in 1983/84 as the world economy improves, while debt service levels should decrease substantially. As a result, the Dominican Republic should be able to finance all of its cereal import requirements in 1983/84.

Haiti

Because of unusual circumstances, there was more food available per capita in Haiti during 1982/83 than usual. The African swine fever eradication program begun in 1982 increased the domestic supply of meat, as hogs in infected areas were slaughtered and sent to market. In addition, the grain not needed for hog production was available for human use, although some was diverted to poultry and other animal production. As the eradication program reaches completion and restocking begins, hog feeding will begin to siphon off its normal share of local grain production, and import demand for food will grow rapidly.

Despite expected gains in output of cereals and roots and tubers in 1983/84, unabated population growth will force continued dependence upon imports next year to supply one-third of total cereal consumption--a pattern likely to be repeated in 1984/85.

The country's weak foreign reserves position has been improved by temporary measures imposed by the International Monetary Fund, but there is only faint hope that these measures will stimulate the economy enough to lead to a financial turnaround. The closing of the bauxite mines in 1982 has complicated efforts to improve export earnings. The Government already depends on foreign assistance for 35 percent of its $372 million budget. In 1983/84, Haiti will have the power to finance only half of the cereal imports that it needs just to maintain current consumption levels. This would still leave the country far short of the imports it needs to meet FAO's nutrition based cereal standards--320,000 tons.

Jamaica

Basic food production is estimated to have improved only slightly in 1982/83, after dropping sharply in 1981/82. Shortages of key inputs such as fertilizer and pesticides continue to depress output. The current easing of import restrictions is also reducing production incentives. The import food needs of Jamaica are expected to continue to expand; they will likely exceed 450,000 metric tons of grain equivalents in 1983/84 and 1984/85, just to maintain recent intake levels.

Jamaica's financial situation weakened in 1982, as it has for the past decade. Export earnings were down another 10 percent from the previous year, because of soft world markets for bauxite and sugar. Meanwhile, imports of food and nonfood items continued to rise. Only refinancing of the public debt and an increasing flow of foreign investment capital kept the economy afloat. It is expected that in 1983/84 Jamaica will be able to purchase only 70 percent of its cereal import requirements. Aid need estimates are particularly high for Jamaica in 1983/84 due to a short-term swelling of debt-service obligations in 1983.

Table 50.--Caribbean basic food data

Country/commodity	Actual or forecast production	Actual or targeted beginning stocks	Net imports	Use: Nonfeed use	Use: Feed use	Use: Total use	Actual or targeted ending stocks	Actual or forecast population	Per capita nonfeed use	Commodities covered and share of daily per capita caloric intake: Commodity	Percent
	1,000 tons							Thousands	Kilos		
Dominican Republic											
Major cereals										Wheat	10.6
1979/80-1982/83	276	82	328	415	203	618	69	5,771	72	Rice	20.0
1982/83 prel.	300	105	345	450	250	700	50	5,995	75	Corn	.1
1983/84 est.	318	50	--	--	215	--	50	6,151	--	Cassava	3.8
1984/85 est.	320	50	--	--	220	--	50	6,310	--	Plantains	9.1
										Bananas	4.0
										Dry beans	2.8
										Milk	4.9
										Total	55.2
Roots and tubers											
1979/80-1982/83	1,081	0	3	1,085	0	1,085	0	5,771	188		
1982/83 prel.	1,150	0	6	1,156	0	1,156	0	5,995	193		
1983/84 est.	1,195	0	--	--	0	--	0	6,151	--		
1984/85 est.	1,190	0	--	--	0	--	0	6,310	--		
Pulses											
1979/80-1982/83	40	0	0	40	0	40	0	5,771	7		
1982/83 prel.	45	0	0	45	0	45	0	5,995	8		
1983/84 est.	45	0	--	--	0	--	0	6,151	--		
1984/85 est.	40	0	--	--	0	--	0	6,310	--		
Milk											
1979/80-1982/83	356	0	0	356	0	356	0	5,771	62		
1982/83 prel.	372	0	0	372	0	372	0	5,995	62		
1983/84 est.	380	0	--	--	0	--	0	6,151	--		
1984/85 est.	390	0	--	--	0	--	0	6,310	--		
Haiti											
Major cereals										Wheat	7.4
1979/80-1982/83	439	11	185	490	139	629	6	5,875	83	Rice	11.0
1982/83 prel.	423	0	206	475	130	605	24	6,083	78	Corn	8.4
1983/84 est.	450	24	--	--	147	--	24	6,229	--	Cassava	3.0
1984/85 est.	460	24	--	--	151	--	24	6,360	--	Sorghum	19.5
										Dry beans	4.2
										Chickpeas	3.4
										Total	56.9
Roots and tubers											
1979/80-1982/83	252	0	3	254	0	254	0	5,875	43		
1982/83 prel.	250	0	7	257	0	257	0	6,083	42		
1983/84 est.	255	0	--	--	0	--	0	6,229	--		
1984/85 est.	260	0	--	--	0	--	0	6,360	--		
Pulses											
1979/80-1982/83	66	0	7	73	0	73	0	5,875	12		
1982/83 prel.	63	0	15	78	0	78	0	6,083	13		
1983/84 est.	63	0	--	--	0	--	0	6,229	--		
1984/85 est.	65	0	--	--	0	--	0	6,360	--		
Jamaica											
Major cereals										Wheat	22.4
1979/80-1982/83	12	9	431	245	199	444	8	2,256	109	Rice	7.8
1982/83 prel.	10	9	418	233	195	428	9	2,296	101	Corn	1.5
1983/84 est.	11	9	--	--	206	--	9	2,327	--	Yams & sweet	
1984/85 est.	12	9	--	--	209	--	9	2,360	--	potatoes	6.1
										Total	37.8
Roots and tubers											
1979/80-1982/83	180	0	0	180	0	180	0	2,256	80		
1982/83 prel.	180	0	0	180	0	180	0	2,296	78		
1983/84 est.	180	0	--	--	0	--	0	2,327	--		
1984/85 est.	180	0	--	--	0	--	0	2,360	--		

Continued--

Table 50.--Caribbean basic food data--continued

Country/commodity	Actual or forecast production	Actual or targeted beginning stocks	Net imports	Use: Nonfeed use	Use: Feed use	Use: Total use	Actual or targeted ending stocks	Actual or forecast population	Per capita nonfeed use	Commodities covered and share of daily per capita caloric intake: Commodity	Commodities covered and share of daily per capita caloric intake: Percent
	1,000 tons							Thousands	Kilos		
Caribbean, total											
Major cereals											
1979/80-1982/83	727	102	944	1,150	541	1,691	83	--	--		
1982/83 prel.	733	114	969	1,158	575	1,733	83	--	--		
1983/84 est.	779	83	--	--	568	--	83	--	--		
1984/85 est.	792	83	--	--	580	--	83	--	--		
Roots and tubers											
1979/80-1982/83	1,513	0	6	1,519	0	1,519	0	--	--		
1982/83 prel.	1,580	0	13	1,593	0	1,593	0	--	--		
1983/84 est.	1,630	0	--	--	0	--	0	--	--		
1984/85 est.	1,630	0	--	--	0	--	0	--	--		
Pulses											
1979/80-1982/83	106	0	7	113	0	113	0	--	--		
1982/83 prel.	108	0	15	123	0	123	0	--	--		
1983/84 est.	108	0	--	--	0	--	0	--	--		
1984/85 est.	105	0	--	--	0	--	0	--	--		
Milk											
1979/80-1982/83	356	0	0	356	0	356	0	--	--		
1982/83 prel.	372	0	0	372	0	372	0	--	--		
1983/84 est.	380	0	--	--	0	--	0	--	--		
1984/85 est.	390	0	--	--	0	--	0	--	--		

-- Not applicable.

Table 51.--Caribbean food requirements, import requirements, and food aid needs to support consumption, status quo- and nutrition-based estimates

Country/ commodity	Forecast domestic production	Total use 1/		Import requirements				Commercial import capacity		Food aid needs			
				Quantity		Value				Quantity		Value	
		Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based	1,000 tons	Million dollars	Status quo	Nutrit. based	Status quo	Nutrit. based
	1,000 tons					Million dollars		1,000 tons	Million dollars	1,000 tons		Million dollars	
Dominican Republic													
Major cereals													
1983/84	318	657	707	339	389	--	--	--	--	--	--	--	--
1984/85	320	674	725	354	405	--	--	--	--	--	--	--	--
Roots and tubers													
1983/84	1,195	1,155	1,226	-40	31	--	--	--	--	--	--	--	--
1984/85	1,190	1,185	1,254	-5	64	--	--	--	--	--	--	--	--
Total above 2/													
1983/84	--	--	--	327	398	56	69	307	53	3/0	80	3/0	14
1984/85	--	--	--	352	423	63	76	324	58	3/0	99	3/0	18
Pulses													
1983/84	45	43	46	0	1	0	4/	7	2	0	0	0	0
1984/85	40	44	47	4	7	2	3	6	3	0	1	0	4/
Milk													
1983/84	380	379	402	0	22	0	32	6	9	0	16	0	24
1984/85	390	389	413	0	23	0	33	7	10	0	16	0	23
Total													
1983/84	--	--	--	--	--	56	102	--	64	--	--	0	38
1984/85	--	--	--	--	--	65	112	--	71	--	--	0	42
Haiti													
Major cereals													
1983/84	450	667	906	217	456	--	--	--	--	--	--	--	--
1984/85	460	681	925	221	465	--	--	--	--	--	--	--	--
Roots and tubers													
1983/84	255	270	229	15	-26	--	--	--	--	--	--	--	--
1984/85	260	275	234	15	-26	--	--	--	--	--	--	--	--
Total above 2/													
1983/84	--	--	--	221	449	58	117	127	33	94	321	24	83
1984/85	--	--	--	226	458	61	124	123	33	103	335	28	91
Pulses													
1983/84	63	77	122	14	59	5	22	1	4/	13	58	5	22
1984/85	65	78	125	13	60	7	29	1	4/	13	59	6	29
Total													
1983/84	--	--	--	--	--	63	139	--	33	--	--	29	106
1984/85	--	--	--	--	--	68	154	--	34	--	--	34	120
Jamaica													
Major cereals													
1983/84	11	459	403	448	392	--	--	--	--	--	--	--	--
1984/85	12	465	409	453	397	--	--	--	--	--	--	--	--
Roots and tubers													
1983/84	180	186	144	6	-36	--	--	--	--	--	--	--	--
1984/85	180	188	146	8	-34	--	--	--	--	--	--	--	--
Total 2/													
1983/84	--	--	--	450	380	99	84	316	70	133	64	29	14
1984/85	--	--	--	456	386	105	89	429	99	27	0	6	0

Continued--

Table 51.--Caribbean food requirements, import requirements, and food aid needs to support consumption, status quo- and nutrition-based estimates--continued

Country/ commodity	Forecast domestic production	Total use 1/		Import requirements				Commercial import capacity		Food aid needs			
				Quantity		Value				Quantity		Value	
		Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based			Status quo	Nutrit. based	Status quo	Nutrit. based
	1,000 tons					Million dollars		1,000 tons	Million dollars	1,000 tons		Million dollars	
Caribbean, total													
Total, major cereals and roots and tubers 2/													
1983/84	--	--	--	998	1,227	213	269	--	--	227	465	54	111
1984/85	--	--	--	1,033	1,267	229	289	--	--	130	434	34	109
Pulses													
1983/84	--	--	--	14	61	5	23	--	--	13	58	5	22
1984/85	--	--	--	17	67	8	33	--	--	13	60	6	30
Milk													
1983/84	--	--	--	0	22	0	32	--	--	0	16	0	24
1984/85	--	--	--	0	23	0	33	--	--	0	16	0	23
Total													
1983/84	--	--	--	--	--	218	325	--	--	--	--	59	157
1984/85	--	--	--	--	--	238	355	--	--	--	--	40	162

1/ The sum of targeted nonfeed and feed use.
2/ Cereal equivalent.
3/ Surplus pulse and milk capacity offsets cereal aid needs.
4/ Less than 1.
-- Not applicable.

Table 52.--Summary of Caribbean cereal import requirements and food aid needs to support consumption, status quo- and nutrition-based estimates

Country	1982/83 imports	1983/84 import requirements		1983/84 aid needs	
		Status quo	Nutrit. based	Status quo	Nutrit. based
	1,000 tons				
Dominican Republic	345	327	398	0	80
Haiti	206	221	449	94	321
Jamaica	418	450	380	133	64
Caribbean, total	969	998	1,227	227	465

Table 53.--Caribbean financial indicators, actual and projected

Country and year	International reserves yearend	Exports (f.o.b.)	Imports (f.o.b.)	Debt service due	1983 and 1984 conditions as of April 1983
	Million dollars				
Dominican Republic					
1979-82	180	980	1,352	302	Declining prices for sugar caused total exports to drop about 30 percent in 1982. Import policies resulted in import decline. Export growth will likely be slow in 1983 and 1984, and imports will probably remain below 1981 levels.
1982 prel.	53	900	1,200	365	
1983 est.	50	950	1,100	291	
1984 est.	50	1,000	1,200	271	
Haiti					
1979-82	28	167	320	10	Increased revenues from coffee and bauxite exports boosted total revenues in 1982. Import growth was low because of foreign exchange constraints.
1982 prel.	15	162	381	13	
1983 est.	10	160	370	18	
1984 est.	5	170	380	21	
Jamaica					
1979-82	92	919	1,174	248	A downturn in world demand for aluminum hurt alumina and bauxite exports, causing a 33-percent drop in total exports. A world recovery will likely increase volumes and prices for alumina and bauxite exports.
1982 prel.	115	920	1,480	239	
1983 est.	100	937	1,470	390	
1984 est.	120	991	1,470	243	
Caribbean, total					
1979-82	299	2,065	2,846	559	
1982 prel.	183	1,982	3,061	616	
1983 est.	160	2,047	2,940	698	
1984 est.	175	2,161	3,050	535	

Table 54.--Caribbean import requirements and aid needs to support cereal stock adjustments 1/

Country	Estimated stock increment		Import requirements				Aid needs			
			Quantity		Value		Quantity		Value	
	Quantity	Value	Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based
	1,000 tons	Million dollars	1,000 tons		Million dollars		1,000 tons		Million dollars	
Dominican Republic										
Cereals										
1983/84	19	3	346	417	60	72	39	110	7	19
1984/85	15	3	367	439	66	79	43	114	8	21
Total										
1983/84	--	3	--	--	57	105	--	--	0	41
1984/85	--	3	--	--	66	115	--	--	0	44
Haiti										
Cereals										
1983/84	2	1	224	451	58	117	96	323	25	84
1984/85	1	2/	226	458	61	124	103	335	28	91
Total										
1983/84	--	1	--	--	63	140	--	--	30	106
1984/85	--	2/	--	--	68	154	--	--	34	120
Jamaica										
Cereals										
1983/84	1	0	450	381	99	84	134	65	30	14
1984/85	0	0	456	386	105	89	27	0	6	0
Total										
1983/84	--	0	--	--	99	84	--	--	30	14
1984/85	--	0	--	--	105	89	--	--	6	0
Caribbean, total										
Cereals										
1983/84	22	4	1,020	1,249	217	273	269	498	61	117
1984/85	16	3	1,049	1,283	232	292	173	406	42	102
Total										
1983/84	--	4	--	--	220	329	--	--	53	161
1984/85	--	3	--	--	239	357	--	--	36	155

1/ Includes only countries for which cereal stock data are available.
2/ Less than 1.
-- Not applicable.

CENTRAL AMERICA SUBREGION

The magnitude of food aid needs in Central America is significantly lower than for the islands of the Caribbean. All countries in Central America, with the exception of El Salvador, are self-sufficient in producing most staples except wheat. And imports can be financed with proceeds from more extensively developed export industries.

In times of peace, this area is not only self-sufficient in food, it even generates substantial surpluses for export. Yet production for export as well as for local consumption has declined somewhat with the recent escalation of civil unrest in El Salvador, Nicaragua, and Guatemala. During the past few years, imported wheat, coarse grains, and soybean meal have become primary components of diets in growing urban areas because of dislocation in local markets.

These countries must export domestic farm products such as sugar, bananas, coffee, and beef to pay for their imports. Currently, depressed world market prices have reduced Central America's ability to pay for imports in the short run. Nevertheless, export earnings are expected to grow nearly 4 percent in 1983/84, allowing most countries in the region to cover needed imports. The notable exception is El Salvador, where civil war has curtailed economic growth and precipitated a 31-percent drop in export earnings in 1982 from the 1978-81 average. Cereal food aid needs should be well over 100,000 tons in 1983/84. But the relative magnitude of needs can change quickly in this region, particularly when one focuses on specific areas within each country. In recent months, for instance, alternating storms and drought have substantially reduced production along the southern west coast and strengthened the possibility of increased import needs in Costa Rica.

Costa Rica

With per capita income (estimated at $1730 in 1980) high and average life expectancy exceeding all but a few developing countries, Costa Rica has the highest standard of living in the region. The economy has benefited from capital investment as larger proportions of import expenditures have been devoted to machinery and transport equipment and smaller proportions to food. This has been made possible in part by healthy growth in the agricultural sector during the last decade. Food production has swelled over 30 percent since 1969-71; current per capita intake of staples--corn, rice, and wheat--is up 11 percent from the average during 1978-81.

The outlook for food production remains favorable for 1983/84. Growth in corn output should keep pace with population gains, and rice production is expected to recover to normal levels from the drought-induced lows of 1982/83. However, wheat import needs are expected to continue in 1983/84 at high levels--about 100,000 tons--comprising most of Costa Rica's cereal import requirements. Costa Rica is forecast to be capable of importing this amount of wheat commercially. Currency reserves at the end of 1983 are expected to be a

comfortable 21 percent of import expenditures, while the trade balance may shift from deficit to surplus in 1983. These favorable financial indicators are the result of stringent import controls, brought on in response to overspending for capital and consumer goods during the late 1970's and early 1980's when export markets were deteriorating.

El Salvador

Protracted civil war and resulting dislocation of population and resources have left the economy of El Salvador in a shambles. Agricultural production is 25-50 percent below prewar levels, and businesses function only sporadically. Armed bands roam the countryside, plundering crops, homes, and villages. Meanwhile, El Salvador's import demand--boosted higher than normal by civil strife--grossly exceeds its ability to pay. The poor condition of transportation arteries and equipment constrains the movement of goods to export points.

Depressed market conditions for coffee, sugar, and other key export items are reducing earnings for the goods that can be shipped out. The increased demand for food and military hardware is pushing the country deeper in debt. Debt-service payments for 1983/84 are forecast to be more than double the level during 1978-81.

Production of corn, rice, and sorghum together declined nearly 20 percent in 1982/83 from a year earlier, and pulse output lost ground as well. Cereal consumption for food dropped 20 kilos per person during the same period, even with the boost of higher cereal imports. In a year of deteriorating production, El Salvadorens became more dependent for food on wheat--a grain that is not grown domestically.

Current estimates suggest a need for a minimum of 138,000 tons of wheat or its equivalent in 1983/84 just to keep the situation from growing worse. An additional 20,000 tons would be required to rebuild cereal stocks to adequate levels. If the war intensifies, these amounts might still be inadequate to maintain recent consumption levels.

Guatemala

Continuing social and political unrest depressed the Guatemalan economy in 1982. Production growth slowed as export markets for industrial and agricultural products in Central American and other countries diminished, causing export earnings to fall an estimated 40 percent. Agriculture suffered as declining export sales and receipts forced restrictions on imports of fertilizer, machinery, and other key inputs.

On the bright side, food production survived input constraints and alternating drought and damaging rains to register appreciable gains in 1982/83 over the preceding year. Per capita cereal output surged an impressive 19 percent ahead of 1981/82, lessening import demand and allowing 1982/83 cereal imports to decrease from 1978/79-1981/82 average levels by over one-quarter. By mid-1983, carryover stocks of corn may swell to 140,000 tons, or nearly 13 percent of total use.

Export earnings are forecast to recover marginally in 1983/84, narrowing the trade deficit and improving the debt-to-exports ratio. Commercial import capacity should be sufficient in 1983/84 to allow Guatemala to pay for needed cereal imports. However, currency reserves will remain low relative to other Central American countries. Reserves are expected to cover less than 10 percent of imports in 1983/84.

Honduras

In per capita income, Honduras is the poorest country in Central America and--after Haiti--in all of South America. This condition has been aggravated in recent years by spillover effects of civil war and unrest in neighboring countries, which have discouraged investment and caused dislocation in Honduras. But agricultural production has weathered these disturbances. Crop production for local use and for export has grown steadily since the mid-1970's, bolstered by gains in sugarcane, coffee, and milk output. A decline in banana production has kept recent food crop production, however, below the high of 1979/80.

Production of staple cereal crops--primarily corn, sorghum, and dry beans--has also improved in recent years. Favorable yields were obtained for staples in 1981/82 and 1982/83, in spite of brief periods of adverse weather in both years. Per capita cereal output increased nearly 8 percent in 1982/83 because of gains in corn production; over two-thirds of gains directly benefit available supplies for human consumption. However, imported wheat is playing a larger role in the Honduran diet because urban residents prefer wheat products. The proportion of the total population living in cities rose from 23 percent in 1960 to over two-thirds in 1980.

In recent years, U.S. wheat sales to Honduras have been subsidized under P.L. 480. The subsidy boosts wheat supplies and helps finance the Government's purchases of inputs such as imported seed, fertilizer, and spare parts for agricultural equipment.

Nicaragua

Nicaragua boasts a well developed and diverse agricultural sector, which has provided sufficient supplies of cereals and livestock products to maintain average caloric intake at 109 percent of the FAO minimum requirement. This has been accomplished in spite of several years of civil strife, which has channeled Government spending toward military hardware and enforced reductions in critical agricultural production inputs to conserve foreign exchange reserves.

Ironically, these import restrictions and resultant slower economic growth worked to reduce the effective demand for food, helping keep supplies in balance with demand. But this balancing has occurred at a lower level of consumption. Localized pockets of poverty and malnutrition exist and Nicaragua cannot produce some commodities such as wheat that have become an entrenched part of the diet.

Nevertheless, the overall food supply outlook for 1983/84 is favorable, despite losses incurred from the summer drought and severe tropical storms of 1982. Total food supplies in 1983/84 are expected to come close to levels of the last 2 years, when per capita nonfeed use of cereals and dry beans ranged from 120 to 130 kilos. Supplies will be enhanced by the estimated near-doubling of corn carryover between 1981/82 and 1982/83--providing increased availabilities of corn at the outset of 1983/84--and by a 2-percent gain in corn output during the year.

Table 55.--Central America basic food data

Country/commodity	Actual or forecast production	Actual or targeted beginning stocks	Net imports	Use: Nonfeed use	Use: Feed use	Use: Total use	Actual or targeted ending stocks	Actual or forecast population	Per capita nonfeed use	Commodities covered and share of daily per capita caloric intake: Commodity	Percent
	1,000 tons							Thousands	Kilos		
Costa Rica											
Wheat										Wheat	11.1
1979/80-1982/83	0	20	98	103	0	103	15	2,256	46	Rice	15.5
1982/83 prel.	0	10	100	110	0	110	0	2,343	47	Corn	7.8
1983/84 est.	0	0	--	--	0	--	0	2,404	--	Total	34.5
1984/85 est.	0	0	--	--	0	--	0	2,460	--		
Rice											
1979/80-1982/83	103	28	-21	81	0	81	28	2,256	36		
1982/83 prel.	71	26	20	90	0	90	27	2,343	38		
1983/84 est.	110	27	--	--	0	--	27	2,404	--		
1984/85 est.	120	27	--	--	0	--	27	2,460	--		
Corn											
1979/80-1982/83	49	10	23	53	19	72	10	2,256	24		
1982/83 prel.	50	10	25	54	21	75	10	2,343	23		
1983/84 est.	55	10	--	--	20	--	10	2,404	--		
1984/85 est.	60	10	--	--	20	--	10	2,460	--		
El Salvador											
Corn										Wheat	7.1
1979/80-1982/83	490	58	3	432	66	498	53	4,876	89	Rice	3.4
1982/83 prel.	409	49	0	348	60	408	50	5,094	68	Corn	39.5
1983/84 est.	488	50	--	--	71	--	50	5,246	--	Sorghum	1.8
1984/85 est.	490	50	--	--	74	--	50	5,400	--	Dry beans	4.5
										Total	56.3
Wheat											
1979/80-1982/83	0	19	122	122	0	122	19	4,876	25		
1982/83 prel.	0	25	132	142	0	142	15	5,094	28		
1983/84 est.	0	15	--	--	0	--	15	5,246	--		
1984/85 est.	0	15	--	--	0	--	15	5,400	--		
Other cereals											
1979/80-1982/83	169	10	15	56	130	185	8	4,876	11		
1982/83 prel.	129	10	47	46	130	176	10	5,094	9		
1983/84 est.	161	10	--	--	140	--	10	5,246	--		
1984/85 est.	165	10	--	--	144	--	10	5,400	--		
Pulses											
1979/80-1982/83	40	6	4	46	0	46	4	4,876	9		
1982/83 prel.	34	0	13	47	0	47	0	5,094	9		
1983/84 est.	40	0	--	--	0	--	0	5,246	--		
1984/85 est.	40	0	--	--	0	--	0	5,400	--		
Guatemala											
Corn										Wheat	7.4
1979/80-1982/83	1,043	64	37	888	164	1,052	92	7,072	125	Corn	47.2
1982/83 prel.	1,217	37	0	950	164	1,114	140	7,356	129	Dry beans	4.7
1983/84 est.	1,100	140	--	--	176	--	140	7,554	--	Total	59.3
1984/85 est.	1,160	140	--	--	180	--	140	7,750	--		
Wheat											
1979/80-1982/83	43	21	102	146	0	146	19	7,072	21		
1982/83 prel.	50	12	108	150	0	150	20	7,356	20		
1983/84 est.	50	20	--	--	0	--	20	7,554	--		
1984/85 est.	50	20	--	--	0	--	20	7,750	--		
Pulses											
1979/80-1982/83	77	6	8	87	0	87	3	7,072	12		
1982/83 prel.	89	2	0	90	0	90	1	7,356	12		
1983/84 est.	85	1	--	--	0	--	1	7,554	--		
1984/85 est.	90	1	--	--	0	--	1	7,750	--		

Continued--

Table 55.--Central America basic food data--continued

Country/commodity	Actual or forecast production	Actual or targeted beginning stocks	Net imports	Use: Nonfeed use	Use: Feed use	Use: Total use	Actual or targeted ending stocks	Actual or forecast population	Per capita nonfeed use	Commodities covered and share of daily per capita caloric intake: Commodity	Percent
	1,000 tons							Thousands	Kilos		
Honduras											
Corn										Wheat	6.3
1979/80-1982/83	422	69	24	327	125	452	63	3,840	85	Corn	39.6
1982/83 prel.	476	70	-10	350	135	485	51	4,040	87	Dry beans	3.4
1983/84 est.	479	51	--	--	136	--	51	4,181	--	Total	49.3
1984/85 est.	495	51	--	--	141	--	51	4,330	--		
Wheat											
1979/80-1982/83	0	13	87	84	0	84	17	3,840	22		
1982/83 prel.	0	30	85	92	0	92	23	4,040	23		
1983/84 est.	0	23	--	--	0	--	23	4,181	--		
1984/85 est.	0	23	--	--	0	--	23	4,330	--		
Pulses											
1979/80-1982/83	41	0	1	41	0	41	0	3,840	11		
1982/83 prel.	45	0	1	46	0	46	0	4,040	11		
1983/84 est.	42	0	--	--	0	--	0	4,181	--		
1984/85 est.	44	0	--	--	0	--	0	4,330	--		
Nicaragua											
Corn										Wheat	6.0
1979/80-1982/83	202	20	18	195	19	213	26	2,693	72	Rice	6.1
1982/83 prel.	248	20	5	215	21	236	37	2,837	76	Corn	28.0
1983/84 est.	253	37	--	--	20	--	37	2,930	--	Dry beans	7.2
1984/85 est.	250	37	--	--	21	--	37	3,040	--	Total	47.3
Other cereals											
1979/80-1982/83	65	34	69	148	0	148	20	2,693	55		
1982/83 prel.	98	68	2	160	0	160	8	2,837	56		
1983/84 est.	98	8	--	--	0	--	8	2,930	--		
1984/85 est.	100	8	--	--	0	--	8	3,040	--		
Pulses											
1979/80-1982/83	47	7	3	50	0	50	8	2,693	18		
1982/83 prel.	60	7	0	53	0	53	14	2,837	19		
1983/84 est.	60	14	--	--	0	--	14	2,930	--		
1984/85 est.	55	14	--	--	0	--	14	3,040	--		
Central America, total											
Wheat											
1979/80-1982/83	43	92	473	519	0	519	89	--	--		
1982/83 prel.	50	121	455	560	0	560	66	--	--		
1983/84 est.	50	66	--	--	0	--	66	--	--		
1984/85 est.	50	66	--	--	0	--	66	--	--		
Rice											
1979/80-1982/83	200	43	-9	204	0	204	30	--	--		
1982/83 prel.	189	52	11	223	0	223	29	--	--		
1983/84 est.	243	29	--	--	0	--	29	--	--		
1984/85 est.	255	29	--	--	0	--	29		--		
Corn											
1979/80-1982/83	2,207	221	104	1,894	393	2,287	244	--	--		
1982/83 prel.	2,400	186	20	1,917	401	2,318	288	--	--		
1983/84 est.	2,375	288	--	--	423	--	288	--	--		
1984/85 est.	2,455	288	--	--	436	--	288	--	--		
Other cereals											
1979/80-1982/83	136	8	8	16	130	146	6	--	--		
1982/83 prel.	109	8	28	7	130	137	8	--	--		
1983/84 est.	126	8	--	--	140	--	8	--	--		
1984/85 est.	130	8	--	--	144	--	8	--	--		
Pulses											
1979/80-1982/83	204	19	16	224	0	224	15	--	--		
1982/83 prel.	228	9	14	236	0	236	15	--	--		
1983/84 est.	227	15	--	--	0	--	15	--	--		
1984/85 est.	229	15	--	--	0	--	15	--	--		

--Not applicable.

Table 56.--Central America food requirements, import requirements, and food aid needs to support consumption, status quo- and nutrition-based

Country/ commodity	Forecast domestic production	Total use 1/		Import requirements				Commercial import capacity		Food aid needs			
				Quantity		Value				Quantity		Value	
		Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based			Status quo	Nutrit. based	Status quo	Nutrit. based
	1,000 tons					Million dollars		1,000 tons	Million dollars	1,000 tons		Million dollars	
Costa Rica													
Wheat													
1983/84	0	109	80	109	80	--	--	--	--	--	--	--	--
1984/85	0	112	82	112	82	--	--	--	--	--	--	--	--
Rice													
1983/84	110	86	91	-24	-19	--	--	--	--	--	--	--	--
1984/85	120	88	94	-32	-26	--	--	--	--	--	--	--	--
Corn													
1983/84	55	76	68	21	13	--	--	--	--	--	--	--	--
1984/85	60	78	70	18	10	--	--	--	--	--	--	--	--
Total 2/													
1983/84	--	--	--	107	74	22	15	157	32	0	0	0	0
1984/85	--	--	--	99	66	21	14	160	34	0	0	0	0
El Salvador													
Corn													
1983/84	488	538	606	50	118	--	--	--	--	--	--	--	--
1984/85	490	553	623	63	133	--	--	--	--	--	--	--	--
Wheat													
1983/84	0	131	120	131	120	--	--	--	--	--	--	--	--
1984/85	0	135	123	135	123	--	--	--	--	--	--	--	--
Other cereals													
1983/84	161	200	213	39	52	--	--	--	--	--	--	--	--
1984/85	165	206	220	41	55	--	--	--	--	--	--	--	--
Total above 2/													
1983/84	--	--	--	219	290	48	63	81	18	138	208	30	45
1984/85	--	--	--	239	310	54	71	82	19	157	229	36	52
Pulses													
1983/84	40	50	62	10	22	2	4	2	3/	8	20	1	4
1984/85	40	51	63	11	23	3	6	2	3/	10	22	2	5
Total													
1983/84	--	--	--	--	--	50	67	--	18	--	--	31	49
1984/85	--	--	--	--	--	57	76	--	19	--	--	38	57
Guatemala													
Corn													
1983/84	1,100	1,123	1,062	23	-38	--	--	--	--	--	--	--	--
1984/85	1,160	1,152	1,092	-8	-68	--	--	--	--	--	--	--	--
Wheat													
1983/84	50	156	168	106	118	--	--	--	--	--	--	--	--
1984/85	50	160	173	110	123	--	--	--	--	--	--	--	--
Total above 2/													
1983/84	--	--	--	129	81	26	16	137	27	0	0	0	0
1984/85	--	--	--	102	55	21	11	138	29	0	0	0	0
Pulses													
1983/84	85	93	96	8	11	4	5	3/	3/	4/ 5	4/ 0	4/ 2	4/ 0
1984/85	90	95	99	5	9	4	6	3/	3/	4/ 0	4/ 0	4/ 0	4/ 0
Total													
1983/84	--	--	--	--	--	30	22	--	27	--	--	2	0
1984/85	--	--	--	--	--	25	17	--	29	--	--	0	0

Continued--

Table 56.--Central America food requirements, import requirements, and food aid needs to support consumption, status quo- and nutrition-based--continued

Country/ commodity	Forecast domestic production	Total use 1/		Import requirements				Commercial import capacity		Food aid needs			
				Quantity		Value				Quantity		Value	
		Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based			Status quo	Nutrit. based	Status quo	Nutrit. based
	1,000 tons					Million dollars		1,000 tons	Million dollars	1,000 tons		Million dollars	
Honduras													
Corn													
1983/84	479	492	581	13	102	--	--	--	--	--	--	--	--
1984/85	495	509	601	14	106	--	--	--	--	--	--	--	--
Wheat													
1983/84	0	91	79	91	79	--	--	--	--	--	--	--	--
1984/85	0	94	82	94	82	--	--	--	--	--	--	--	--
Total above 2/													
1983/84	--	--	--	103	181	21	36	97	20	6	80	1	16
1984/85	--	--	--	108	188	23	39	100	21	8	84	2	18
Pulses													
1983/84	42	45	42	3	0	1	0	2	1	1	0	1	0
1984/85	44	46	43	2	0	1	0	1	1	1	0	1	0
Total													
1983/84	--	--	--	--	--	22	36	--	20	--	--	2	16
1984/85	--	--	--	--	--	24	39	--	22	--	--	2	18
Nicaragua													
Corn													
1983/84	253	232	243	-21	-10	--	--	--	--	--	--	--	--
1984/85	250	240	251	-10	1	--	--	--	--	--	--	--	--
Other cereals													
1983/84	98	160	108	62	10	--	--	--	--	--	--	--	--
1984/85	100	166	112	66	12	--	--	--	--	--	--	--	--
Total above 2/													
1983/84	--	--	--	40	3/	11	3/	31	8	5/0	0	5/0	0
1984/85	--	--	--	56	13	16	4	38	11	5/3	5/0	5/1	5/0
Pulses													
1983/84	60	54	57	0	0	0	0	8	3	0	0	0	0
1984/85	55	56	58	1	3	1	2	8	4	0	0	0	0
Total													
1983/84	--	--	--	--	--	11	3/	--	12	--	--	0	0
1984/85	--	--	--	--	--	16	5	--	15	--	--	1	0
Central America, total													
Total, major cereals and roots and tubers 2/													
1983/84	--	--	--	600	626	127	131	--	--	144	288	31	61
1984/85	--	--	--	604	632	135	139	--	--	168	313	38	70
Pulses													
1983/84	--	--	--	20	33	7	9	--	--	14	20	4	4
1984/85	--	--	--	20	35	8	13	--	--	11	22	3	5
Total													
1983/84	--	--	--	--	--	134	140	--	--	--	--	36	65
1984/85	--	--	--	--	--	143	152	--	--	--	--	41	75

1/ The sum of targeted nonfeed and feed use.
2/ Cereal equivalent.
3/ Less than 1.
4/ Surplus in grain capacity offsets pulse aid needs.
5/ Surplus in pulse capacity offsets cereal aid needs.
-- Not applicable.

Table 57.--Summary of Central America cereal import requirements and food aid needs to support consumption, status quo- and nutrition-based estimates

Country	1982/83 imports	1983/84 import requirements: Status quo	1983/84 import requirements: Nutrit. based	1983/84 aid needs: Status quo	1983/84 aid needs: Nutrit. based
	1,000 tons				
Costa Rica	145	107	74	0	0
El Salvador	179	219	290	138	208
Guatemala	108	129	81	0	0
Honduras	75	103	181	6	80
Nicaragua	7	40	1/	0	0
Central America, total	514	600	626	144	288

1/ Less than 1.

Table 58.--Central America financial indicators, actual and projected

Country and year	International reserves yearend	Exports (f.o.b.)	Imports (f.o.b.)	Debt service due	1983 and 1984 conditions as of April 1983
	Million dollars				
Costa Rica					
1979-82	151	991	1,181	251	Exports and imports both increased in domestic currency (colones), but fell in dollars because of a 75-percent devaluation. Import growth is apt to remain fairly low because of the devaluations, unless domestic inflation accelerates.
1982 prel.	207	991	1,000	371	
1983 est.	200	1,019	970	388	
1984 est.	210	1,055	1,000	386	
El Salvador					
1979-82	99	891	847	49	Domestic conflict is interrupting export-import trade. Production of coffee and cotton has probably declined since 1981.
1982 prel.	106	656	800	78	
1983 est.	100	659	800	75	
1984 est.	100	692	850	74	
Guatemala					
1979-82	352	1,300	1,429	64	Declining exports of sugar and cotton offset increases in bananas and coffee, causing total exports to decline. Import declines stemmed from low investment expenditures.
1982 prel.	115	1,160	1,300	101	
1983 est.	115	1,200	1,300	75	
1984 est.	100	1,300	1,400	83	
Honduras					
1979-82	143	785	872	202	Lower beet and coffee exports pushed total exports down in 1982. Imports also declined, because of a decline in the domestic economy. Slow economic growth could bring imports up only slightly in 1983. Export growth will probably be very slow because of weak international demand.
1982 prel.	110	757	850	261	
1983 est.	110	791	900	258	
1984 est.	110	848	950	272	
Nicaragua					
1979-82	NA	480	740	151	Declining coffee and cotton exports caused a fall in overall exports in 1982. Recent internal conflicts could throw the economy into renewed dissaray if they escalate.
1982 prel.	NA	400	900	287	
1983 est.	NA	450	850	283	
1984 est.	NA	500	900	286	
Central America, total					
1979-82	744	4,447	5,069	717	
1982 prel.	538	3,963	4,850	1,098	
1983 est.	525	4,119	4,820	1,079	
1984 est.	520	4,396	5,100	1,100	

NA = Not available.

Table 59.--Central America import requirements and aid needs to support cereal stock adjustments 1/

Country	Estimated stock increment		Import requirements				Aid needs			
			Quantity		Value		Quantity		Value	
	Quantity	Value	Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based
	1,000 tons	Million dollars	1,000 tons		Million dollars		1,000 tons		Million dollars	
Costa Rica										
Cereals										
1983/84	17	3	124	91	25	19	0	0	0	0
1984/85	13	3	111	78	24	17	0	0	0	0
Total										
1983/84	--	3	--	--	25	19	--	--	0	0
1984/85	--	3	--	--	24	17	--	--	0	0
El Salvador										
Cereals										
1983/84	17	4	236	307	52	67	155	225	34	49
1984/85	3	1	242	314	55	71	160	232	36	53
Total										
1983/84	--	4	--	--	53	71	--	--	35	53
1984/85	--	1	--	--	58	77	--	--	39	58
Guatemala										
Cereals										
1983/84	1	2/	130	81	26	16	0	0	0	0
1984/85	4	1	107	59	22	12	0	0	0	0
Total										
1983/84	--	2/	--	--	30	22	--	--	3	0
1984/85	--	1	--	--	26	18	--	--	0	0
Honduras										
Cereals										
1983/84	11	2	114	192	23	38	17	94	3	19
1984/85	10	2	118	198	25	41	18	98	4	21
Total										
1983/84	--	2	--	--	24	38	--	--	4	18
1984/85	--	2	--	--	26	41	--	--	4	19
Nicaragua										
Cereals										
1983/84	6	2	47	6	12	2	15	0	4	0
1984/85	6	2	63	19	17	5	24	0	7	0
Total										
1983/84	--	2	--	--	10	2/	--	--	0	0
1984/85	--	2	--	--	18	7	--	--	3	0
Central America, total										
Cereals										
1983/84	51	11	651	677	138	142	147	173	33	37
1984/85	36	8	641	669	143	147	122	150	30	34
Total										
1983/84	--	11	--	--	143	150	--	--	33	40
1984/85	--	8	--	--	151	160	--	--	32	41

1/ Includes only countries for which cereal stock data are available.
2/ Less than 1.
-- Not applicable.

SOUTH AMERICA SUBREGION

Production of food staples in the low-income countries of South America had to withstand both adverse weather and rapidly deteriorating economic conditions in 1982/83. The lack of the seasonal change normally brought on by the "Nino current" resulted in a combination of drought and floods throughout the region. Consequently, normal planting and harvesting seasons were disrupted and per capita food production declined. At the same time, a shortage of foreign exchange limited commercial import purchasing power. Depressed demand for these countries' exports reduced foreign exchange earnings. Earnings were also eroded by high external debt--much of it accumulated during the 1970's--in countries such as Bolivia and Peru.

These factors worked to constrain economic growth and prevent 1982/83 food supplies in some countries from improving as hoped. Considering all countries in the region, however, overall cereal stocks--including wheat, rice, and corn--are estimated to have finished 1982/83 an encouraging 15 percent ahead of carryin levels. This, coupled with expected gains in cereal output in most countries, brightens the regional outlook for food supplies in 1983/84. The cereal production outlook assumes a return to normal weather throughout the region and stronger world demand for the area's major exports, including coffee, cocoa, and petroleum. The major exception to this outlook is Bolivia, where weather and economic problems have all but ensured a bleak supply picture in 1983/84.

Bolivia

A combination of natural disasters and economic problems during 1982/83 have resulted in a drastic reduction in the current availability of basic foods. Expectations for 1983/84's total food output are considerably lower than the alltime highs achieved in 1981/82. The highlands have suffered the worst drought in memory, reducing 1983/84 potato availability to 80 percent of normal. This has caused many people from rural areas to migrate to the cities in search of food. In the commercial agricultural region of Santa Cruz, a flood during the 1982/83 harvest sharply reduced many crops, especially rice, corn, cotton, and sugar. Early in 1983, a second flood destroyed bridges and farm-to-market roads, futher reducing food production in the region. According to local estimates, Bolivia in 1983/84 will be facing shortages of rice (50,000 tons), corn (90,000 tons), and potatoes (500,000 tons). Without substantial increases in food aid from donor nations, famine in the highlands and critical food shortages in the urban areas can be expected within the next few months.

Furthermore, prospects for any recovery in production over the next several years have been severely dimmed by current conditions. Farmers in the highlands, caught without food supplies, are forced to consume the seed potatoes needed for later plantings. Local observers are concerned that the loss of irreplaceable potato germplasm may result. In addition, livestock herds are being reduced because of both higher mortality rates and increased slaughter. Forecast 1983/84 per capita availabilities of major cereals and tuber crops, excluding imports, are just over half of the level in the previous year.

The economic outlook for Bolivia continues to be bleak as well. The recently elected civilian Government's stringent economic emergency package, intended to improve the external position of the country and reduce the debt, has met stiff opposition from local interest groups. In Santa Cruz, rehabilitation of the commercial farming infrastructure after the second flood is likely to require considerable financial resources, straining the already limited budget. Foreign reserves used to import raw materials necessary for economic growth are low. And Bolivia's service on its debt in 1983 is forecast to equal 56 percent of total merchandise export earnings. So, in the short term at least, Bolivia must rely heavily on foreign assistance to improve economic and social conditions. Food aid imports of 333,000 tons, cereal equivalent, are needed in 1983/84 merely to restore consumption to previous levels. Additional aid would be required to provide caloric intake at the recommended minimum.

Colombia

Overall agricultural production increased by only 1 percent in Colombia in 1982/83, because of erratic weather and depressed consumer demand. But for major staple cereals, output rose 7.6 percent. Similar gains were achieved for roots and tubers such as potatoes and plantains. Per capita cereal consumption was up an estimated 4.5 percent. However, agricultural exports--especially coffee--declined because of depressed world prices. But foreign borrowing and tighter import restrictions allowed the Government to finish 1982 with estimated foreign exchange reserves of about $3.7 billion. Measured as a percentage of import expenditures, Colombia's foreign exchange reserves are the highest of all the 67 countries covered in this report. As a result, Colombia continues to be able to commercially purchase virtually all of the cereal imports needed to maintain its per capita intake, which has usually comprised 110-120 percent of the FAO recommended minimum.

Adequate supplies of roots and tubers and rice will only partially offset heavier requirements for corn and wheat in 1983/84. Colombia annually imports nearly half a million tons of wheat alone, to satisfy demands of an urban population that has grown to include nearly three-quarters of all Colombians.

Ecuador

Agriculture in Ecuador suffered from a combination of economic and weather-related events in 1982/83. In the early part of the year, drought reduced cotton and coffee production. Later in the year, heavy rains and floods cut soybean, corn, rice, banana, and sugar harvests. In the financial sector, a continued weakness in the world market for petroleum curtailed Ecuador's oil revenues and depressed currency reserves, leading to the first devaluation of the sucre in a decade. Interest payments for foreign debt jumped 20 percent in 1982. In addition, the austerity measures undertaken to achieve refinancing of debt were met by labor unrest.

The outlook for 1983/84 is more encouraging. Agricultural output is expected to recover from the weather-reduced harvests of the previous year, while the devalued sucre should make Ecuador's exports attractive, improving export prospects for

bananas, cocoa, and coffee. However, the nation's chronic dependence on imported wheat is expected to continue in 1983/84. Imports supply 35-40 percent of Ecuador's total domestic cereal use. Cereal-equivalent food aid needs in 1983/84 are forecast at 72,000 tons to maintain current consumption levels, and more than double that to meet FAO nutritional standards. In addition, because consumption of milk--a major staple food in Ecuador--represents only 45 percent of FAO's recommended minimum caloric intake for that food in Ecuador, large imports of milk would be required in 1983/84 to help establish nutritionally adequate diets.

Peru

Total agricultural production in Peru has shown modest gains over the past 10 years, but growth has been unsteady and improvement highly variable across commodities. Increases in poultry and cotton output have been counterbalanced by long-term declines in sugarcane, wheat, and selected roots and tubers. Furthermore, per capita production of most major staple foods has eroded since the mid-1970's. In particular, the decline in wheat production has occurred during a surge in demand for wheat. Wheat imports--which constitute over one-third of cereal use in Peru--are estimated to have reached 1 million tons in 1982/83.

During 1982/83, marginal gains in production of major cereals were offset by a 20-percent decline in output of roots and tubers such as cassava, plantains, and potatoes. This decline was brought on by heavy rains and year-end flooding in the north. Paradoxically, these problems improved pasture conditions for dairy and beef production. Despite an estimated buildup of cereal stocks, per capita availabilities of all foodstuffs continued to be stretched by population gains and increased use of corn for feed.

Peru endured one of the highest rates of inflation of any developing country during the 1970's, and neared bankruptcy late in the decade because of a mushrooming trade deficit. This deficit appears to be declining somewhat, though, and currency reserves for 1983/84 are forecast at levels adequate to cover imports. But debt-service payments, connected to the current standby agreement negotiated with the IMF, are expected to comprise 61 percent of export earnings in the same year. And with demand for wheat forecast to continue unabated, Peru will require concessional financing assistance for over 40 percent of its 1.3-million-ton cereal import requirement in 1983/84.

Table 60.--South America basic food data

Country/commodity	Actual or forecast production	Actual or targeted beginning stocks	Net imports	Use: Nonfeed use	Use: Feed use	Use: Total use	Actual or targeted ending stocks	Actual or forecast population	Per capita nonfeed use	Commodities covered and share of daily per capita caloric intake: Commodity	Percent
	1,000 tons							Thousands	Kilos		
Bolivia											
Wheat										Wheat	18.3
1979/80-1982/83	54	43	244	311	10	321	18	5,420	57	Rice	7.6
1982/83 prel.	60	2	270	320	10	330	2	5,630	57	Corn	8.1
1983/84 est.	65	2	--	--	11	--	2	5,776	--	Cassava	6.1
1984/85 est.	65	2	--	--	11	--	2	5,925	--	Potatoes	10.3
										Total	50.3
Rice											
1979/80-1982/83	62	6	1	63	0	63	7	5,420	12		
1982/83 prel.	70	5	0	68	0	68	7	5,630	12		
1983/84 est.	10	7	--	--	0	--	7	5,776	--		
1984/85 est.	70	7	--	--	0	--	7	5,925	--		
Corn											
1979/80-1982/83	346	0	0	125	221	346	0	5,420	23		
1982/83 prel.	360	0	0	153	207	360	0	5,630	27		
1983/84 est.	250	0	--	--	236	--	0	5,776	--		
1984/85 est.	370	0	--	--	242	--	0	5,925	--		
Roots and tubers											
1979/80-1982/83	980	0	0	980	0	980	0	5,420	181		
1982/83 prel.	1,020	0	0	1,020	0	1,020	0	5,630	181		
1983/84 est.	490	0	--	--	0	--	0	5,776	--		
1984/85 est.	740	0	--	--	0	--	0	5,925	--		
Colombia											
Wheat										Wheat	5.5
1979/80-1982/83	57	199	461	493	5	498	220	27,042	18	Rice	11.7
1982/83 prel.	72	195	450	518	4	522	195	27,891	19	Corn	12.0
1983/84 est.	75	195	--	--	5	--	195	28,477	--	Plantains	7.3
1984/85 est.	75	195	--	--	5	--	195	29,075	--	Milk	6.0
										Potatoes	4.3
										Total	46.9
Rice											
1979/80-1982/83	1,231	198	-54	1,104	103	1,207	168	27,042	41		
1982/83 prel.	1,270	143	-40	1,054	170	1,224	149	27,891	38		
1983/84 est.	1,300	149	--	--	107	--	149	28,477	--		
1984/85 est.	1,300	149	--	--	109	--	149	29,075	--		
Corn											
1979/80-1982/83	889	80	119	910	83	992	96	27,042	34		
1982/83 prel.	917	74	122	959	80	1,039	74	27,891	34		
1983/84 est.	920	74	--	--	87	--	74	28,477	--		
1984/85 est.	900	74	--	--	89	--	74	29,075	--		
Roots and tubers											
1979/80-1982/83	4,374	0	-92	4,282	0	4,282	0	27,042	158		
1982/83 prel.	4,720	0	-138	4,582	0	4,582	0	27,891	164		
1983/84 est.	4,600	0	--	--	0	--	0	28,477	--		
1984/85 est.	4,600	0	--	--	0	--	0	29,075	--		
Milk											
1979/80-1982/83	2,451	0	6	2,457	0	2,457	0	27,042	91		
1982/83 prel.	2,872	0	-7	2,865	0	2,865	0	27,891	103		
1983/84 est.	2,950	0	--	--	0	--	0	28,477	--		
1984/85 est.	3,000	0	--	--	0	--	0	29,075	--		

Continued--

Table 60.--South America basic food data--continued

Country/commodity	Actual or forecast production	Actual or targeted beginning stocks	Net imports	Use: Nonfeed use	Use: Feed use	Use: Total use	Actual or targeted ending stocks	Actual or forecast population	Per capita nonfeed use	Commodities covered and share of daily per capita caloric intake: Commodity	Percent
	1,000 tons							Thousands	Kilos		
Ecuador											
Wheat										Wheat	11.7
1979/80-1982/83	23	14	300	315	11	326	12	8,132	39	Rice	10.0
1982/83 prel.	23	11	320	335	12	347	7	8,508	39	Corn	3.8
1983/84 est.	23	7	--	--	12	--	7	8,771	--	Cassava	4.5
1984/85 est.	25	7	--	--	12	--	7	9,044	--	Plantains	6.3
										Milk	7.8
										Potatoes	6.1
										Total	50.2
Rice											
1979/80-1982/83	198	38	13	207	3	210	40	8,132	25		
1982/83 prel.	220	43	10	243	0	243	30	8,508	29		
1983/84 est.	230	30	--	--	3	--	30	8,771	--		
1984/85 est.	235	30	--	--	3	--	30	9,044	--		
Corn											
1979/80-1982/83	230	44	0	31	200	231	43	8,132	4		
1982/83 prel.	264	43	-10	20	230	250	47	8,508	2		
1983/84 est.	260	47	--	--	215	--	47	8,771	--		
1984/85 est.	270	47	--	--	222	--	47	9,044	--		
Roots and tubers											
1979/80-1982/83	2,074	0	5	2,079	0	2,079	0	8,132	256		
1982/83 prel.	2,080	0	0	2,080	0	2,080	0	8,508	244		
1983/84 est.	2,142	0	--	--	0	--	0	8,771	--		
1984/85 est.	2,140	0	--	--	0	--	0	9,044	--		
Milk											
1979/80-1982/83	423	0	10	433	0	433	0	8,132	53		
1982/83 prel.	460	0	12	472	0	472	0	8,508	55		
1983/84 est.	475	0	--	--	0	--	0	8,771	--		
1984/85 est.	480	0	--	--	0	--	0	9,044	--		
Peru											
Wheat										Wheat	17.7
1979/80-1982/83	104	75	903	999	0	999	83	17,845	56	Rice	11.3
1982/83 prel.	120	80	1,000	1,110	0	1,110	90	18,538	60	Corn	9.7
1983/84 est.	120	90	--	--	0	--	90	19,057	--	Cassava	2.7
1984/85 est.	120	90	--	--	0	--	90	19,552	--	Plantains	2.9
										Potatoes	6.6
										Total	50.9
Rice											
1979/80-1982/83	343	83	126	434	0	434	118	17,845	24		
1982/83 prel.	480	150	103	503	0	503	230	18,538	27		
1983/84 est.	500	230	--	--	0	--	230	19,057	--		
1984/85 est.	500	230	--	--	0	--	230	19,552	--		
Corn											
1979/80-1982/83	558	30	351	435	461	896	43	17,845	24		
1982/83 prel.	600	20	450	440	580	1,020	50	18,538	24		
1983/84 est.	600	50	--	--	490	--	50	19,057	--		
1984/85 est.	800	50	--	--	503	--	50	19,552	--		
Roots and tubers											
1979/80-1982/83	2,488	0	-38	2,450	0	2,450	0	17,845	137		
1982/83 prel.	2,230	0	0	2,230	0	2,230	0	18,538	120		
1983/84 est.	2,460	0	--	--	0	--	0	19,057	--		
1984/85 est.	2,480	0	--	--	0	--	0	19,552	--		

Continued--

Table 60.--South America basic food data--continued

Country/commodity	Actual or forecast production	Actual or targeted beginning stocks	Net imports	Use: Nonfeed use	Use: Feed use	Use: Total use	Actual or targeted ending stocks	Actual or forecast population	Per capita nonfeed use	Commodities covered and share of daily per capita caloric intake: Commodity	Commodities covered and share of daily per capita caloric intake: Percent
	1,000 tons							Thousands	Kilos		
South America, total											
Wheat											
1979/80-1982/83	237	331	1,908	2,117	26	2,143	333	--	--		
1982/83 prel.	275	288	2,040	2,283	26	2,309	294	--	--		
1983/84 est.	283	294	--	--	28	--	294	--	--		
1984/85 est.	285	294	--	--	29	--	294	--	--		
Rice											
1979/80-1982/83	1,835	325	86	1,808	106	1,913	332	--	--		
1982/83 prel.	2,040	341	73	1,868	170	2,038	416	--	--		
1983/84 est.	2,040	416	--	--	110	--	416	--	--		
1984/85 est.	2,105	416	--	--	112	--	416	--	--		
Corn											
1979/80-1982/83	2,022	154	470	1,500	965	2,465	181	--	--		
1982/83 prel.	2,141	137	562	1,572	1,097	2,669	171	--	--		
1983/84 est.	2,030	171	--	--	1,028	--	171	--	--		
1984/85 est.	2,340	171	--	--	1,055	--	171	--	--		
Roots and tubers											
1979/80-1982/83	9,915	0	-125	9,790	0	9,790	0	--	--		
1982/83 prel.	10,050	0	-138	9,912	0	9,912	0	--	--		
1983/84 est.	9,692	0	--	--	0	--	0	--	--		
1984/85 est.	9,960	0	--	--	0	--	0	--	--		
Milk											
1979/80-1982/83	2,874	0	16	2,890	0	2,890	0	--	--		
1982/83 prel.	3,332	0	5	3,337	0	3,337	0	--	--		
1983/84 est.	3,425	0	--	--	0	--	0	--	--		
1984/85 est.	3,480	0	--	--	0	--	0	--	--		

-- Not applicable.

Table 61.--South America food requirements, import requirements, and food aid needs to support consumption, status quo- and nutrition-based estimates

Country/ commodity	Forecast domestic production	Total use 1/		Import requirements				Commercial import capacity		Food aid needs			
				Quantity		Value				Quantity		Value	
		Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based			Status quo	Nutrit. based	Status quo	Nutrit. based
		1,000 tons				Million dollars		1,000 tons	Million dollars	1,000 tons		Million dollars	
Bolivia													
Wheat													
1983/84	65	342	356	277	291	--	--	--	--	--	--	--	--
1984/85	65	351	365	286	300	--	--	--	--	--	--	--	--
Rice													
1983/84	10	67	105	57	95	--	--	--	--	--	--	--	--
1984/85	70	69	112	-1	42	--	--	--	--	--	--	--	--
Corn													
1983/84	250	368	373	118	123	--	--	--	--	--	--	--	--
1984/85	370	378	394	8	24	--	--	--	--	--	--	--	--
Roots and tubers													
1983/84	490	1,044	1,223	554	733	--	--	--	--	--	--	--	--
1984/85	740	1,071	1,320	331	580	--	--	--	--	--	--	--	--
Total 2/													
1983/84	--	--	--	590	703	90	107	257	39	333	445	51	68
1984/85	--	--	--	376	522	60	83	327	52	48	194	8	31
Colombia													
Wheat													
1983/84	75	524	494	449	419	--	--	--	--	--	--	--	--
1984/85	75	535	504	460	429	--	--	--	--	--	--	--	--
Rice													
1983/84	1,300	1,271	918	-29	-382	--	--	--	--	--	--	--	--
1984/85	1,300	1,298	936	-2	-364	--	--	--	--	--	--	--	--
Corn													
1983/84	920	1,044	983	124	63	--	--	--	--	--	--	--	--
1984/85	900	1,066	1,001	166	101	--	--	--	--	--	--	--	--
Roots and tubers													
1983/84	4,600	4,508	4,016	-92	-584	--	--	--	--	--	--	--	--
1984/85	4,600	4,603	4,087	3	-513	--	--	--	--	--	--	--	--
Total above 2/													
1983/84	--	--	--	517	0	92	0	567	101	0	0	0	0
1984/85	--	--	--	625	17	116	3	489	91	3/ 99	0	3/ 19	0
Milk													
1983/84	2,950	2,581	2,508	0	0	0	0	6	8	0	0	0	0
1984/85	3,000	2,635	2,560	0	0	0	0	5	7	0	0	0	0
Total													
1983/84	--	--	--	--	--	92	0	--	109	--	--	0	0
1984/85	--	--	--	--	--	116	3	--	98	--	--	19	0

Continued--

Table 61.--South America food requirements, import requirements, and food aid needs to support consumption, status quo- and nutrition-based estimates--continued

Country/ commodity	Forecast domestic production	Total use 1/		Import requirements				Commercial import capacity		Food aid needs			
				Quantity		Value				Quantity		Value	
		Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based			Status quo	Nutrit. based	Status quo	Nutrit. based
	1,000 tons					Million dollars		1,000 tons	Million dollars	1,000 tons		Million dollars	
Ecuador													
Wheat													
1983/84	23	351	328	328	305	--	--	--	--	--	--	--	--
1984/85	25	362	338	337	313	--	--	--	--	--	--	--	--
Rice													
1983/84	230	225	232	-5	2	--	--	--	--	--	--	--	--
1984/85	235	232	239	-3	4	--	--	--	--	--	--	--	--
Corn													
1983/84	260	248	307	-12	47	--	--	--	--	--	--	--	--
1984/85	270	256	317	-14	47	--	--	--	--	--	--	--	--
Roots and tubers													
1983/84	2,142	2,245	2,380	103	238	--	--	--	--	--	--	--	--
1984/85	2,140	2,314	2,429	174	289	--	--	--	--	--	--	--	--
Total above 2/													
1983/84	--	--	--	342	417	102	125	245	73	3/ 72	172	3/ 21	51
1984/85	--	--	--	372	442	116	138	254	79	3/ 96	188	3/ 30	59
Milk													
1983/84	475	466	896	0	421	0	706	5	8	0	417	0	698
1984/85	480	481	924	1	444	2	743	5	8	0	439	0	735
Total													
1983/84	--	--	--	--	--	102	830	--	81	--	--	21	749
1984/85	--	--	--	--	--	117	881	--	87	--	--	30	793
Peru													
Wheat													
1983/84	120	1,065	1,067	945	947	--	--	--	--	--	--	--	--
1984/85	120	1,092	1,094	972	974	--	--	--	--	--	--	--	--
Rice													
1983/84	500	463	540	-37	40	--	--	--	--	--	--	--	--
1984/85	500	475	553	-25	53	--	--	--	--	--	--	--	--
Corn													
1983/84	600	954	1,012	354	412	--	--	--	--	--	--	--	--
1984/85	800	979	1,056	179	256	--	--	--	--	--	--	--	--
Roots and tubers													
1983/84	2,460	2,619	3,243	159	783	--	--	--	--	--	--	--	--
1984/85	2,480	2,687	3,317	207	837	--	--	--	--	--	--	--	--
Total 2/													
1983/84	--	--	--	1,320	1,645	272	339	761	157	559	884	115	182
1984/85	--	--	--	1,198	1,546	257	332	1,140	245	58	406	13	87
South America, total													
Total cereals 2/													
1983/84	--	--	--	2,770	2,765	557	571	1,831	371	963	1,501	187	302
1984/85	--	--	--	2,571	2,526	550	556	2,210	467	302	788	69	177
Milk													
1983/84	--	--	--	0	421	0	706	10	15	0	417	0	698
1984/85	--	--	--	1	444	2	743	10	15	0	439	0	735
Total													
1983/84	--	--	--	--	--	557	1,276	--	386	--	--	187	1,000
1984/85	--	--	--	--	--	551	1,299	--	482	--	--	69	912

1/ The sum of targeted nonfeed and feed use.
2/ Cereal equivalent.
3/ Surplus milk capacity partially offsets cereal aid needs.
-- Not applicable.

Table 62.--Summary of South America cereal import requirements and food aid needs to support consumption, status quo- and nutrition-based estimates

Country	1982/83 imports	1983/84 import requirements: Status quo	1983/84 import requirements: Nutrit. based	1983/84 aid needs: Status quo	1983/84 aid needs: Nutrit. based
	1,000 tons				
Bolivia	270	590	703	333	445
Colombia	532	517	0	0	0
Ecuador	320	342	417	72	172
Peru	1,553	1,320	1,645	559	884
South America, total	2,675	2,770	2,765	963	1,501

Table 63.--South America financial indicators, actual and projected

Country and year	International reserves yearend	Exports (f.o.b.)	Imports (f.o.b.)	Debt service due	1983 and 1984 conditions as of April 1983
	Million dollars				
Bolivia					
1979-82	131	881	681	340	Trade surplus increased in 1982 because of reduced imports and slight growth in exports. Continued low investment in mining sector restrained production. Foreign exchange constraints, aggravated by high debt-service payments and 160 percent devaluation from 1981, limited imports. Increasing volumes and prices for exports could improve trade surplus in 1983.
1982 prel.	140	912	550	548	
1983 est.	150	966	600	538	
1984 est.	170	1,052	680	478	
Colombia					
1979-82	4,290	3,563	4,176	851	Low prices and export volumes for coffee dampened Colombia's trade performance in 1982, though fuel-oil exports increased. Devaluations and low economic growth probably caused imports to decline. Slow export growth is likely in 1983 because of continuing slack demand for coffee.
1982 prel.	3,745	3,525	4,500	900	
1983 est.	3,750	3,598	4,250	1,000	
1984 est.	3,750	3,857	4,500	1,200	
Ecuador					
1979-82	683	2,505	2,288	598	Exports increased only slightly in 1982, because demand for petroleum, coffee, and cocoa was weak. Devaluations and import policies cut the growth of imports and expanded the trade surplus. Export growth will likely be slow in 1983 because of low prices and volumes for petroleum. Continuing devaluations and IMF measures will probably restrain imports.
1982 prel.	365	2,780	2,450	718	
1983 est.	350	2,871	2,500	789	
1984 est.	350	3,043	2,600	792	
Peru					
1979-82	1,184	3,168	3,180	1,473	Slack demand for Peru's export commodities kept export revenues from increasing in 1982. Low domestic growth and scarce foreign reserves limited imports. Debt/merchandise exports ratio was nearly 50 percent in 1982. Trade deficit is likely to improve through 1984.
1982 prel.	1,425	2,000	3,900	1,569	
1983 est.	1,500	2,458	3,900	1,499	
1984 est.	1,600	2,960	4,200	1,424	
South America, total					
1979-82	6,288	10,117	10,325	3,262	
1982 prel.	5,675	9,218	11,400	3,735	
1983 est.	5,750	9,893	11,250	3,825	
1984 est.	5,870	10,912	11,980	3,894	

Table 64.--South America import requirements and aid needs to support cereal stock adjustments 1/

Country	Estimated stock increment		Import requirements				Aid needs			
			Quantity		Value		Quantity		Value	
	Quantity	Value	Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based
	1,000 tons	Million dollars	1,000 tons		Million dollars		1,000 tons		Million dollars	
Bolivia										
Cereals										
1983/84	22	3	613	725	94	111	355	468	54	72
1984/85	1	2/	376	523	60	83	49	195	8	31
Total										
1983/84	--	3	--	--	94	111	--	--	54	72
1984/85	--	2/	--	--	60	83	--	--	8	31
Colombia										
Cereals										
1983/84	95	17	612	25	109	4	45	0	8	0
1984/85	69	13	694	86	129	16	205	0	38	0
Total										
1983/84	--	17	--	--	-385	-587	--	--	0	0
1984/85	--	13	--	--	-359	-573	--	--	0	0
Ecuador										
Cereals										
1983/84	20	6	362	437	108	130	117	192	35	57
1984/85	15	5	387	456	120	142	133	202	41	63
Total										
1983/84	--	6	--	--	94	836	--	--	13	755
1984/85	--	5	--	--	122	885	--	--	35	798
Peru										
Cereals										
1983/84	8	2	1,328	1,653	274	340	567	892	117	184
1984/85	10	2	1,208	1,556	259	334	68	416	15	89
Total										
1983/84	--	2	--	--	274	340	--	--	117	184
1984/85	--	2	--	--	259	334	--	--	15	89
South America, total										
Cereals										
1983/84	145	28	2,915	2,839	585	586	1084	1009	214	216
1984/85	94	20	2,665	2,620	569	576	454	410	102	108
Total										
1983/84	--	28	--	--	76	700	--	--	0	314
1984/85	--	20	--	--	82	730	--	--	0	248

1/ Includes only countries for which cereal stock data are available.
2/ Less than 1.
-- Not applicable.

ALLOCATING FOOD AID

Many factors could be usefully considered in dividing limited food aid supplies among needy countries. These range from quantitative factors such as measures of relative needs, to more qualitative factors such as recipient countries' efforts to maintain budgetary discipline and to implement self-help policies encouraging greater local production.

A detailed discussion and comparison of qualitative factor lies beyond the scope of this study as it is currently defined. This section offers two simple quantitative methods for comparing aid needs across countries. First, the food aid needs calculated in earlier sections are scaled back proportionally across countries to match the aid availabilities that were also estimated earlier. Second, food aid needs are calculated in per capita terms and countries are ranked according to the magnitude of per capita aid needs. The allocations and rankings presented here are examples of possible allocations and should not be construed as official USDA recommendations.

Scaling Down Food Aid Needs

To generate table 65, total aid availabilities are expressed as a proportion of total aid needs. This proportion will be less than 1.0 as long as food aid donors do not contribute enough to satisfy the needs of recipient countries. This proportion, or ratio, is then applied to food aid estimates to scale them back so that total aid needs equal total availabilities.

Given the aid availabilities estimated for 1983/84, each low-income country is accordingly allocated 73 percent of its status quo aid needs and 27 percent of its nutrition-based aid needs.

This simplistic scaling-down of aid needs has one important shortcoming from an equity perspective--it does not offer an effective indication of the relative severity of needs across countries. Another quantitative method for comparing needs is therefore presented below.

Ranking Countries

Table 66 provides a per capita ranking of aid needs. Several countries with the same absolute level of aid needs have quite

Table 65.--1983/84 food aid needs by country, total and scaled down to world food aid availabilities

Region/ country	Status quo-based food aid needs		Nutrition-based food aid needs	
	Total	Scaled-down	Total	Scaled-down
	Million dollars			
Africa and Middle East				
Angola	13	8	12	3
Benin	11	7	-9	-9
Burundi	1/	1/	6	2
Cameroon	1/	1/	28	7
Cape Verde	4	3	3	1
Central African Republic	9	5	34	9
Chad	73	45	379	96
Comoros	5	3	15	4
Congo	4	2	5	1
Djibouti	-2	-2	NA	NA
Egypt	597	371	-68	-68
Equatorial Guinea	1	1	NA	NA
Ethiopia	62	38	310	78
Gambia	-3	-3	-3	-3
Ghana	50	31	137	34
Guinea	26	16	113	28
Guinea-Bissau	9	6	11	3
Kenya	61	38	276	70
Lebanon	14	8	41	10
Lesotho	52	32	39	10
Liberia	24	15	14	3
Madagascar	105	65	49	12
Malawi	1/	1/	33	8
Mali	55	34	318	80
Mauritania	21	13	29	7
Mauritius	3	2	1/	1/
Morocco	35	22	66	17
Mozambique	111	69	250	63
Niger	48	30	38	10
Rwanda	89	55	85	21
Senegal	-13	-13	15	4
Sierra Leone	9	5	2	1
Somalia	171	106	527	133
Sudan	39	24	88	22
Swaziland	19	12	15	4
Tanzania	199	123	383	97
Togo	12	7	31	8
Tunisia	-1	-1	-45	-45
Uganda	-2	-2	192	49
Upper Volta	2	1	90	23
Yemen, YAR	41	25	32	8
Yemen, PDR	6	4	16	4
Zaire	12	8	239	60
Zambia	13	8	67	17
Asia				
Afghanistan	34	21	40	10
Bangladesh	233	145	1300	328
India	-216	-216	2398	605
Indonesia	68	42	-466	-466
Kampuchea	5	3	12	3
Laos	-6	-6	-2	-2
Nepal	0	0	226	57
Pakistan	-307	-307	-354	-354
Philippines	65	41	107	27
Sri Lanka	16	10	77	19
Vietnam	185	115	289	73
Latin America				
Bolivia	51	32	68	17
Colombia	-16	-16	-109	-109
Costa Rica	-10	-10	-17	-17
Dominican Republic	-8	-8	38	9
Ecuador	21	13	749	189
El Salvador	31	20	49	12
Guatemala	2	2	-6	-6
Haiti	29	18	106	27
Honduras	2	1	16	4
Jamaica	29	18	14	4
Nicaragua	-1	-1	-12	-12
Peru	115	71	182	46

1/ Less than $500,000.
NA = Not available.

different per capita needs. The wide margin between per capita measures reflects differences in the severity of the food problems these countries face.1/

The pronounced disparity between the status quo and nutrition-based results also points up the differences inherent in the two procedures. Countries such as Somalia and Chad rank high in both cases. As a general rule, this indicates a large margin between domestic per capita food availabilities and the supplies of staples required to raise per capita intake to the levels associated with the FAO recommended minimum. This sizable gap has been filled in recent years either by large commercial imports which are no longer affordable, or by food aid. In the case of Somalia, high per capita estimates are also due to an influx of more refugees than can be fed from domestically produced supplies or commercial imports.

Countries like Nepal, Ecuador, and Uganda have much higher nutrition-based than status quo-based per capita aid needs. The wide margin is indicative of a serious gap between recent per capita food intake levels and the supplies necessary to achieve the FAO recommended minimum. This sizable gap has not been filled by commercial imports or food aid in recent years.

Countries such as Egypt, Liberia, and Jamaica have high per capita aid needs using the status quo method but relatively low needs using the nutrition method. In these countries, domestic production, commercial imports, or food aid donations have pushed per capita intake levels close to or above the FAO minimum. Aid allocations to those countries using the status quo-based estimates would support consumption above the FAO recommended minimum.

1/Adjustments were made in both the status quo- and nutrition-based aid indicators to compensate for the different proportion of the diet made up by the staples analyzed in the report. The percentage of the diet covered--derived from the 1975-77 FAO Food Balance Sheets--must be factored into the allocation estimates to prevent biasing per capita aid needs upward or downward for countries with a large or small proportion of their diets made up of the staples analyzed. Other things being equal, a country with 75 percent of its staple diet covered would have a greater per capita food aid need than a country with 50 percent of its staple diet covered. To incorporate this adjustment, per capita food aid needs are calculated as follows: estimated food aid need ($)/(Percent of diet comprised by commodities analyzed in this report/group mean percent of diet covered)/population.

Table 66.--Per capita food aid needs, 1983/84 1/

Region/ country	Status quo-based food aid needs		Nutrition-based food aid needs	
	Dollars	Rank	Dollars	Rank
Africa and Middle East				
Angola	2.0	39	1.7	50
Benin	2.4	34	-2.1	58
Burundi	.1	52	1.4	52
Cameroon	2/	53	2.8	43
Cape Verde	13.2	9	10.4	25
Central African Republic	3.3	29	12.7	19
Chad	14.8	6	77.3	3
Comoros	12.1	11	34.0	5
Congo	2.3	35	2.7	45
Djibouti	-6.1	66	NA	NA
Egypt	12.8	10	-1.5	57
Equatorial Guinea	2.6	33	NA	NA
Ethiopia	1.7	42	8.4	30
Gambia	-4.9	65	-4.9	61
Ghana	3.5	26	9.6	28
Guinea	4.1	24	17.9	11
Guinea-Bissau	14.8	7	17.5	12
Kenya	3.2	30	14.6	16
Lebanon	5.0	23	15.1	14
Lesotho	30.1	3	22.8	7
Liberia	11.8	12	6.6	34
Madagascar	11.3	13	5.3	37
Malawi	2/	55	4.7	39
Mali	6.8	21	39.1	4
Mauritania	15.5	5	21.6	8
Mauritius	4.0	25	.3	54
Morocco	1.5	43	2.8	44
Mozambique	7.4	18	16.7	13
Niger	7.6	16	6.1	35
Rwanda	14.5	8	13.8	17
Senegal	-2.2	63	2.5	47
Sierra Leone	2.3	36	.6	53
Somalia	35.6	1	110.2	1
Sudan	1.9	40	4.3	41
Swaziland	33.9	2	26.0	6
Tanzania	10.4	15	20.0	9
Togo	3.4	27	9.1	29
Tunisia	-.1	56	-7.7	64
Uganda	-.1	57	13.0	18
Upper Volta	.2	51	10.9	21
Yemen, YAR	6.9	19	5.4	36
Yemen, PDR	3.3	28	8.3	31
Zaire	.4	49	7.0	33
Zambia	2.2	37	10.9	23
Asia				
Afghanistan	2.0	38	2.4	48
Bangladesh	1.8	41	9.9	27
India	-.2	58	2.7	46
Indonesia	.4	48	-2.5	59
Kampuchea	.6	46	1.5	51
Laos	-1.3	61	-.3	55
Nepal	.0	54	10.9	22
Pakistan	-3.1	64	-3.6	60
Philippines	1.2	44	1.9	49
Sri Lanka	1.0	45	4.6	40
Vietnam	2.7	32	4.2	42
Latin America				
Bolivia	11.2	14	15.0	15
Colombia	-.8	60	-5.2	62
Costa Rica	-7.8	67	-13.0	65
Dominican Republic	-1.5	62	7.1	32
Ecuador	3.1	31	108.6	2
El Salvador	6.8	20	10.6	24
Guatemala	.4	50	-.8	56
Haiti	5.3	22	19.0	10
Honduras	.5	47	5.0	38
Jamaica	21.3	4	10.3	26
Nicaragua	-.5	59	-5.4	63
Peru	7.6	17	12.0	20

1/ Food aid needs were divided by population. Food aid need data are adjusted to compensate for variations in percent of diet composed of staple foods covered in this report.
2/ Less than $500,000.
** Not available.

METHODOLOGICAL NOTES

Calculating Food Aid Needs

This report provides measures of the need for food aid to support consumption of major food staples and to support an adequate level of food security stocks for food grains. The framework used for calculating food aid needs to support consumption for each country, total and by commodity, is outlined below in algebraic form:

$$(1)\quad FANCV_t = IRCV_t - CICV_t$$

$$(2)\quad FANCV_j = IRCV_j - CICV_j;\ \text{subject to } IRCV_j > 0$$

$$(3)\quad FANCQ_j = IRCQ_j - CICQ_j;\ \text{subject to } IRCQ_j > 0$$

where the subscript t indicates a country total, and the subscript j indicates a group of substitutable food commodities (see section below on substitution assumptions) in the country, and where:

FANCV = food aid needs to support consumption, value ($ million);

FANCQ = food aid needs to support consumption, quantity (1,000 tons);

IRCV = food import requirements to support consumption, value ($ million);

IRCQ =food import requirements to support consumption, quantity (1,000 tons);

CICV = commercial food import capacity, value ($ million); and

CICQ = commercial food import capacity, quantity (thousand tons).

The general framework for calculating $IRCV_t$, $IRCV_j$, and $IRCQ_j$ is as follows:

$$(4)\quad IRCV_t = \sum_{j=1}^{k} IRCV_j;\ \text{subject to } IRCV_j > 0$$

where k is the number of groups of substitutable food staples in a country;

$$(5)\quad IRCV_j = IRCQ_j \cdot IUV_j$$

where IUV = estimated import unit values in dollars (see section below on import unit value calculations); and

$$(6)\quad IRCQ_j = \sum_{i=1}^{n} (IRCQ_i/WE_i)$$

where the subscript i indicates an individual food staple and n is the number of food staples in a substitutable food group, and where:

IRCQ = estimated import requirement for a commodity in 1,000 tons, and

WE = wheat-equivalent conversion factors for a commodity if the commodity is a noncereal and is assumed to be substitutable for cereals on a caloric-equivalent basis.

The procedures used for calculating IRCQ in status quo and nutrition-based estimates are described in separate sections below. The structure for both of these IRCQ calculations is as follows:

$$(7)\quad IRCQ_i = DR_i - PR_i$$

$$(8)\quad DR_i = DRNF_i + DRF_i$$

where:

DR = domestic requirement in 1,000 tons;

DRNF = domestic requirement for nonfeed use in 1,000 tons;

DRF = domestic requirement for feed use in 1,000 tons (see section below on method of calculating feed use); and

PR = forecast production in 1,000 tons (source: ERS estimates).

The procedure for calculating $CICV_t$ in equation (1) above is :

$$(9) \quad CICV_t = \sum_{j=1}^{k} CICV_j$$

The method of calculating CICVj and CICQj is described in a separate section below.

The following points should be noted on the treatment and interpretation of negative values in import requirement and food aid need calculations:

1. A negative import requirement for a commodity group in quantity and value terms ($IRCQ_j < 0$, $IRCV_j < 0$) implies a 'surplus' in domestic production above what is needed to support consumption. The surplus is, by definition, not substitutable for any shortfalls in other commodity groups. While these negative values, where they occur, are carried in the tables containing estimates of food aid need to support consumption, they are factored in as zeros when calculating food aid quantity and value needed to support consumption for the commodity group ($FANCQ_j$, $FANCV_t$). This is appropriate because inclusion of the negative value would imply exports of the calculated surplus (and an addition to commercial import capacity). If the country is a traditional exporter of the surplus commodity, the impact of the export earnings on food aid needs is already accounted for in the commercial import capacity calculation. If the country is not a traditional exporter of the surplus commodity, imposition of an export requirement for the purpose of aid need calculations would be an unnecessarily rigid means of assessment.

2. When a negative food aid need value occurs for a commodity group ($FANCV_j < 0$), this calculated surplus is made to offset any positive food aid need ($FANCV_j > 0$) for other commodity groups in that country. This is appropriate because of conditions imposed on the calculation of food aid needs for commodity groups ($FANCQ_j$, $FANCV_j$) described above. Negative food aid need values imply a surplus of estimated commercial import capacity in a food group; the surplus can appropriately be diverted to purchases in another food group. These situations are footnoted in the country tables.

3. Negative country food aid need totals imply a surplus in commercial import capacity ($CICV_t$), over and above what imports are needed to support consumption in all commodity groups ($IRCV_t$) in the country. They do not imply food aid

availability. $FANCV_t$, whether positive or negative, is the value used in the food aid need ranking provided in the section of this report entitled "Allocating Food Aid."

4. When a country's total food aid need to support consumption in value terms is negative ($FANCV_t < 0$), the negative value is converted to 0. Negative country food aid need totals to support consumption ($FANCV_t < 0$) represent the 'surpluses' of cereals (and cereal equivalents) and commercial import capacity which can be applied to offset positive aid needs in other food categories.

With estimates derived in this way, the larger the gap between domestic food availabilities and food requirements, or the smaller the capacity to import food commercially, the larger the aid need. Other things being equal, gains in domestic production, or lower levels of feed use, will reduce estimated import requirements and food aid needs. To the extent that the food staples selected for a country are judged to be substitutable, any estimated surpluses are applied to filling the gap for commodities estimated to be in deficit. Also, for any commodity group where a surplus commercial import capacity exists, that surplus is applied to any estimated deficits for other commodity groups. No allowance is made for the effects of stock adjustments, positive or negative, on import requirements or aid needs. The need for stock adjustments and their impact on aid needs are estimated separately, as described in following sections.

Calculating Status Quo-Based Import Requirements

Status quo-based import requirements for a particular country, commodity, and year are calculated, following equation (7) in the previous section, as:

$$(10) \quad IRCQ = (DRNF + DRF) - (PR)$$

where DRF and PR are as defined elsewhere. Status quo-based estimates of domestic requirements for nonfeed use (DRNF) are calculated as:

$$(11) \quad DRNF = P \cdot PCC_B/1000$$

where:

P = population in millions;

PCC = per capita nonfeed consumption of a commodity in kilograms per year; and

subscript B = the base period over which PCC is averaged, in this report 1979-82.

Note that one or more years of unusually low (or unusually high) per capita food availability during the base period will distort import requirements. It is therefore necessary to scrutinize the representativeness of each base period year when interpreting status quo-based import requirement and aid need estimates.

Calculating Nutrition-Based Import Requirements

The general form of the nutrition-based import requirement equation is the same as shown in (7) above. But, because the nutrition-based method uses a nutritional norm rather than the status quo, it is necessary to assess domestic availabilities and domestic nonfeed requirements on a net basis--net of milling, seed, waste, and nonfood use. With these adjustments, the nutrition-based import requirement calculations for a particular country, commodity, and year are as follows:

$$(12)\quad IRCO = ((DRNF_m - DA_m)/MR) + DRF$$

$$(13)\quad DRNF_m = (PCCAL_B/PCCAL_{TB})(RMPCCAL_T)(CALCF_m)(365)(P)/1000$$

$$(14)\quad DA_m = [(PR)\ (1 - (NFUR + WR + AUR) - (SR \cdot PR)]\ (MR)\ (1 - NFUR_m + WR_m)$$

The variables IRCQ, DRNF, DRF, P, and PR have been described elsewhere. The new variables in the nutrition-based equation are:

DA = domestic availability in 1,000 tons;

MR = milling/extraction rate of particular commodity (source: FAO),

subscript m = indicates a variable expressed in milled/extracted terms;

PCCAL = daily per capita consumption of a particular commodity in calories (source: FAO and ERS; see notes below);

subscript B = the base period used to specify per capita caloric consumption (see notes below);

subscript T = a total for all commodities in the diet;

RMPCCAL = recommended minimum total daily caloric intake (source: FAO);

CALCF = factor for converting calories per capita for a particular commodity to kilograms per capita (source: FAO);

NFUR = average rate of utilization for nonfood purposes for a particular commodity during 1975-77 (source: FAO);

WR = rate of waste for a particular commodity (source: FAO);

AUR = average rate of use in alcoholic beverages manufactured from a particular commodity during 1975-77 (source: FAO); and

SR = average rate of seed use from production for a particular commodity during 1975-77 (source: FAO).

Thus, in the nutrition-based method, domestic requirements for nonfeed use (DRNF) in milled/extracted terms are calculated by first determining commodity caloric shares in the total diet in a base period and, on the basis of those shares, determining the per capita caloric amounts needed to achieve the FAO recommended minimum. These per capita daily caloric estimates are then converted to annual countrywide requirements in terms of tons of milled commodity. Domestic availability (DA) is calculated in milled terms by adjusting coarse domestic production (PR) for nonfood use, waste, alcoholic beverage use, and seed use, and milling/extraction losses using rates derived from the FAO food balances. Import requirements in coarse terms are then computed as the unmilled difference between DRNF and DA plus requirements for feed use (DRF). It is important to note that the import requirement estimates derived from this procedure do not allow for reductions from waste, nonfood use, or alcoholic beverage and seed use from imported commodities; only reductions for feed use and milling/extraction are accommodated.

The appropriate measure of coarse domestic production (PR) for the nutrition-based method is identical to that used in the status-quo method. The calculation of import requirements (IRCQ) in coarse terms is shown above, and the appropriate calculation of coarse domestic requirements (DR) for the nutrition-based method is:

(15) $DR = PR + IRCQ.$

The following points should be noted on procedures used in the nutrition-based calculations:

1. Calories available from a commodity are derived using the 1975-77 FAO food balance data for a particular commodity and country.

2. The base period used in calculating each commodity's caloric share in the diet in each country is 1975-77, unless the average suggests use of 1 of the 3 years individually. In some instances, it was necessary to adjust a particular commodity's share of total caloric intake because of differences in ERS and FAO production or trade data or because of changes in diet composition since 1977.

3. Calculations of coarse per capita consumption from the targeted coarse total use and population data provided may yield slightly different levels for 1983 and 1984. They may vary from year to year because no nonfood use, waste, alcoholic beverage use, or seed use is deducted from imports and the mix of imports and domestic availability may change from year to year. At the levels shown for targeted coarse total use and population, however, actual per capita consumption of a commodity will be identical in both years.

4. For many countries, the proportion of feed use implied in the 1975-77 FAO food balances is very similar to that implied by the estimates of feed use (DRF) in this report. Where significant differences occurred, adjustments were made in the base-period human consumption levels (PCCALiB and PCCALTB) for the purposes of the nutrition-based calculations. These alterations were judged necessary to allow the use of a common assumption on feed use for both methods, and to prevent differences in assumptions from interfering with the interpretation of the two food aid need estimates.

5. Because rice is normally traded on a milled (as opposed to paddy) basis, and all rice production, stock, and trade data presented in this report are on a milled basis, the nutrition-based import requirement equations used for rice are modified to accommodate this difference.

Import requirements estimated this way would provide enough food per person to meet the FAO recommended minimum daily caloric intake. The FAO caloric standards have been criticized for overestimating minimum requirements. For purposes of this report, however, the key issue is whether the caloric standards introduce any bias across the countries examined. Because food balance assumptions are of similar reliability for all countries covered, and the methods used for calculating food balances are consistent, it is unlikely that significant bias is introduced. In any event, errors in absolute levels of estimates would not prevent the use of those estimates in generating country rankings. Also, errors do not prevent the priorities indicated from being preserved when food aid needs are scaled down in some manner to match food aid availabilities.

Calculating Feed Use

The same levels of estimated feed use are included in the calculation of both the status quo- and nutrition-based estimates. The procedure used to calculate feed (DRF) use of a particular commodity in a given country and year is:

$$(16) \quad DRF = P \cdot PCCF_B/1000$$

where P is population in thousands as defined earlier, and

PCCF = per capita utilization of a commodity for livestock feed (source: ERS estimates), and

subscript B = the base period over which PCCF is averaged. The base period used in this report is 1978-81.

With this method of calculation, feed use grows from the base period average at the same rate as population. The implication, which is intended for the purpose of food and need estimates, is that no growth in feed use is provided for. The representativeness of the base period average must, however, be scrutinized when interpreting the calculated levels of feed use. Import requirement estimates for countries experiencing rapid growth in feed use (and livestock production) are constrained by this procedure.

Calculating Food Security Stock Adjustment

This report provides separate estimates of countries' cereal stock adjustment needs to assure food security. Stock requirements are segregated from consumption requirements because, for food aid allocation purposes, assured food to support consumption may be viewed as the first priority. Nevertheless, a program which adjusted food aid allocations to recipient countries' stock positions could help prevent food emergencies in these countries, and also help reduce abrupt swings in food aid needs from year to year. This would be achieved by allowing for stock building in relatively good years and for stock drawdown in relatively bad years.

In this report, estimates of stock adjustments are made only for the commodity group comprising cereals and cereal equivalents for countries where historical stock data are available. Stock adjustment estimates are limited to the cereal-equivalent category because historical stock data commonly are only available for this commodity group, and because cereals are the predominant food staple in recipient countries. The procedures for estimating stock adjustments outlined below use historical relationships between stocks and consumption in each country. In the absence of consistent data on stock-building targets and minimally acceptable stock levels to be drawn down to, historical stock levels are used to define the range of adjustment.

The procedures are outlined in algebraic form. Stock levels are calculated in absolute terms and in terms of increments to be added to (or subtracted from) existing stocks. These increments are then added to estimates of import requirements and food aid needs to support consumption in order to obtain an estimate of needs to support both consumption and stocks. The following variables are used in estimating stock adjustments:

TPCE = total production of cereals and cereal equivalents in 1,000 tons;

TCEES = total ending stocks of cereals and cereal equivalents in 1,000 tons;

ESR = ratio of ending stocks to total nonfeed use;

$MNESR_B$ = average ratio of ending stocks to total nonfeed use for cereal equivalents during base period B (1979-1982 in this report);

$MXESR_B$ = maximum ratio of ending stocks to total nonfeed use for cereal equivalents during base period B;

$MINESR_B$ = minimum ratio of ending stocks to total nonfeed use for cereal equivalents during base period B;

SQNFU = status quo-based estimate of domestic requirements for nonfeed use (DRNF) in 1,000 tons;

subscript t = year for which stock adjustment is being calculated;

ASL = adjusted stock level in 1,000 tons;

SAQ = stock adjustment in terms of the increment to existing stocks in 1,000 tons; and

SAV = stock adjustment in $1 million.

Using the above-named variables the adjusted stock level (ASL) for year t (the first forecast year) is calculated in the following way:

If $TPCE_t >$ trend and $ESR_{t-1} < 1.1 * MNESR_B$:

$$ASL_t = (ESR_{t-1} + (MXESR_B - ESR_{t-1})/3)*SQNFU_t$$

If $TPCE_t >$ trend and $ESR_{t-1} > 1.1 * MNESR_B$:

$$ASL_t = ESR_{t-1} + *SQNFU_t$$

If $TPCE_t <$ trend and $ESR_{t-1} < .9 * MNESR_B$:

$$ASL_t = (ESR_{t-1} + (MXESR_B - ESR_{t-1})/3)*SQNFU_t$$

If $TPCE_t$ < trend and 1.1 * $MNESR_B$ > ESR_{t-1} .9 * $MNESR_B$:

$$ASL_t = ESR_{t-1} * SQNFU_t, \text{ and}$$

If $TPCE_t$ < trend and $ESR_{t-1} > 1.1 * MNESR_B$:

$$ASL_t = ((ESR_{t-1} + MINESR_B)/2) * SQNFU_t.$$

The stock adjustment for year t in quantity (SAQ_t) and value (SAV_t) terms is calculated as:

$$SAQ_t = ASL_t - TCEES_t, \text{ and}$$

$$SAV_t = SAQ_t * IUV_t$$

where IUV_t is the estimated import unit value for cereals in year t as defined in a previous section.

The adjusted stock level for (ASL) for year t+1 (the second out year) is calculated using the identical equations as for year t with the following substitutions:

1. The subscript t+1 is substituted for the subscript t.

2. The variable $AESR_t$ (adjusted ending stock ratio in year t) is substituted for ESR_{t-1}, where $AESR_t = ASL_t/SQNFU_t$

The stock adjustment for year t+1 in quantity (SAQ_{t-1}) and

value (SAV_{t+1}) is calculated as:

$$SAQ_{t+1} + ASL_{t+1} - ASL_t, \text{ and}$$

$$SAV_{t+1} = SAQ_{t+1} * IUV_{t+1}.$$

Stock adjustments calculated by the procedures described above have the following characteristics:

1. If production is above trend, stocks are built up if they are relatively low and are allowed to remain relatively high if they are already relatively high. If production is below trend, stocks are built up if they are relatively low, left unchanged if they are around the base-period mean, and drawn down if they are relatively high. If stocks are relatively low, stock building is allowed for both base-period above and below trend production situations for reasons of food security.

2. The rates of stock adjustment used in the calculations were, when building, one-third of the difference between maximum stocks and current stocks, and when drawing down,

one-half the difference between minimum stocks and the current stocks. A faster rate was used for drawing down than for building because generally stocks are drawn down more rapidly than they are rebuilt. The one-third rate used for stock building implies a 3-year stock building period.

3. The procedures assume the reasonableness of working with minimum, maximum, and mean ending stock ratios observed during the base period, given the lack of consistent data on appropriate stock targets and minimum acceptable stock levels. Moreover, government stock targets, where available, may not be consistent with either historically achieved stock levels or existing storage facilities. The use of adjustments toward rather than to the base-period levels diminishes the effect of errors caused by atypical base-period observations.

4. The magnitude of year-to-year stock adjustments (SAQ, SAV) depends on both the calculated change in the ending stock ratio in t+1 and the difference between actual total nonfeed use in t and status quo-based nonfeed use (SQNFU) in t+1. In some cases, abrupt changes in nonfeed use estimated between t and t+1 may distort the intended direction of the stock adjustment. (For example, even if the situation calls for an increase in the ending stock ratio, or ESR, stocks could decine from t to t+1 if the status quo estimate of nonfeed use (SQNFU) for t+1 was sharply below actual use in t.) These situations are described in the country narratives.

5. The stock adjustment estimates (SAQ, SAV) can be applied to the consumption estimates for cereals to obtain an overall estimate of import requirements ($IRTQ_{ce}$, $IRTV_{ce}$) and food aid needs ($FANTQ_{ce}$, $FANTV_{ce}$) for cereals in the following way:

   a. If $IRCQ_{ce}$ and $IRCV_{ce}$ are negative (implying a surplus of cereals which can be applied to stock adjustments):

      $IRTQ_{ce} = IRCQ_{ce} + SAQ;$

      $IRTV_{ce} = IRCV_{ce} + SAV;$

      $FANTQ_{ce} = FANCQ_{ce} + IRTQ_{ce}$ subject to $IRTQ_{ce} \geq 0;$

      $FANTV_{ce} = FANCV_{ce} + IRTV_{ce},$ subject to $IRTV_{ce} \geq 0.$

If import requirements remain negative after adding the stock adjustment, food aid needs are not affected. This situation implies a surplus of cereals above what is needed to support consumption and stock adjustment, but a surplus which cannot be exported for foreign exchange or applied against deficits in other non-substitutable food catgories.

b. If $IRCQ_{ce}$ and $IRCV_{ce}$ are positive (implying no surplus of cereals which can be applied to stock adjustments):

$$IRTQ_{ce} = IRCQ_{ce} + SAQ;$$

$$IRTV_{ce} = IRCV_{ce} + SAV;$$

$$FANTQ_{ce} = FANCQ_{ce} + SAQ; \text{ and}$$

$$FANTV_{ce} = FANCV_{ce} + SAV.$$

Calculating Import Unit Values

Import unit value (IUV) estimates are used in this report to convert tonnage import requirements (IRCQ) to value estimates (IRCV), and to convert estimated commercial import capacities in dollars (CICV) to tonnage terms (CICQ). Import unit values are computed for each country, year, and commodity group j as follows:

$$IUV_j = (IUV_{jB}/USXUV_{jB})FUSXUV$$

where:

IUV_{jB} = a country's average import unit value for commodity group j during a base period B. The actual base period used for each country varies with data availability. In some cases, lack of current data has necessitated the estimation of import unit values from those of nearby countries (sources: FAO and ERS).

$USXUV_{jB}$= the average U.S. export unit value for commodities in group j during a base period B. The base period used for a particular country is the same as that used in calculating IUVj (source: U.S. Bureau of Census).

$FUSCUV_j$= the forecast U.S. export unit value for commodities in group j for the appropriate year (source: ERS).

Estimated import unit values are, therefore, dependent on a base-period ratio between a country's import unit value and the U.S. export unit value, and on the forecast U.S. export unit value of a particular group of commodities. The use of the base-period ratio is intended to compensate for differences in transport costs to various countries from both U.S. and non-U.S. ports, depending on who the base period suppliers were.

Commodity Coverage

The commodities included in the food aid needs assessment for each country were selected to cover the important food staples in the diet in each country. An attempt was made to include staples accounting for at least two-thirds of the average daily caloric intake in each country, to assure that assessment of domestic food availability and requirements in each country are representative of the total food supply situation. For a few countries, less than two-thirds of the diet is covered. This is due either to great diversity in the average diet; to limited availability of current, reliable data; or to both. Coverage is more complete in Asian and African countries, where relatively few food staples account for the bulk of the average diet, and less complete in Latin American countries, where diets are more diversified. The specific commodities included in the food aid needs assessment for each country and their share in daily per capita caloric intake in the appropriate base period are included in the tables.

Food Substitution Assumption

Assumptions regarding the substitutability of foods in the diet are necessary in assessing food aid needs, because shortages in some food items can be compensated for by surpluses or imports of others. Also, some food items which figure prominently in diets in low-income countries, particularly roots and tubers, are not commonly traded and, therefore, are not available to fill food aid requirements.

In this report, all cereals (including wheat, rice, and coarse grains) are considered substitutable on a one-for-one basis. Roots and tubers (bananas and plantains are included for convenience of calculating cereal-equivalent) are assumed substitutable for cereals on a caloric equivalent basis. The treatment of pulses depends on their importance and role in the diet.

In African countries, where pulses constitute a relatively small share of the diet, they are assumed substitutable for cereals on a caloric-equivalent basis. In Asia and Latin America, however, where pulses serve as important complements to cereals and are major sources of protein, they are not considered substitutable for cereals and remain separate in the aid need estimates. Vegetable oils and milk are not considered substitutable for cereals in any case because of their very different roles in food preparation and consumption.

Where applicable, commodities are converted to wheat equivalents. The conversion factors are derived from the FAO food balances and are specific to particular countries and commodities.

Calculating Commercial Import Capacity

A country's capacity to pay for imports of food staples is calculated in two steps. The first formula measures the country's available foreign exchange and is as follows:

(1) $FEA = MEE - [(IR_B/MI_B \cdot MI) - IR] - DS;$

where:

FEA = estimated foreign exchange availability in $1 million

MEE = projected merchandise export earnings in $1 million (sources: World Bank and ERS);

IRCB = international reserves during the base period in million dollars (sources: IMF and World Bank);

MIB = merchandise imports during the base period in $1 million (sources: IMF and World Bank);

MI = projected merchandise imports in $1 million (sources: World Bank and ERS);

IRC = projected international reserves in $1 million (sources: World Bank and ERS);

DS = projected debt service in $1 million (sources: World Bank and ERS); and

B = the base period over which IRC and MI are averaged, (in this report, 1978-81.

Simply put, this formula states that the foreign exchange available for commercial food imports depends on export earnings, less any allowance for the accumulation or drawdown of reserves and debt-service payments. The allowance for reserves is based on the notion that during the projection period a country be permitted to maintain a ratio of reserves to imports equal to the ratio in the base period. The term within the brackets determines the allowance for the accumulation of reserves.

To illustrate, take the case of Colombia, where, for 1983:

MEE = 3598

IRCB = 4290

MIB = 4176

MI = 4250

IRC = 3750

DS = 1000

(2) $FEA = 3598 - [\frac{4290}{4176} * 4250) - 3750] - 1000$

(3) $FEA = 3598 - [4366 * 4250) - 3750] - 1000$

(4) $FEA = 3598 - [4366 - 3750 - 1000$

(5) $FEA = 3598 - [616] - 1000$

(6) $FEA = 1982$

Equation (3) indicates that, from 1979-82, Columbia held reserves equal to about 103 percent of imports. After multiplication of this figure by the 1983 import projection, equation (4) shows that $4,366 million of reserves are needed to maintain the same reserves/imports ratio. Equation (5) shows the amount of reserves that Columbia is allowed to accumulate--the difference between reserves needed to maintain the base-period ratio and projected reserves. Equation (6) indicates the available foreign exchange for Columbia in 1983.

The next step in the formula determines the amount of available foreign exchange to be applied toward commercial imports of foods in a particular group of substitutable foods (cereals, and roots and tubers, pulses, vegetable oils, etc.) designated by the subscript j. This step is specified as follows:

(7) $CICV_j = FEA \cdot (CFI_{jB}/MEE_B)$

where:

$CICV_j$ = estimated commercial import capacity for food commodities in group j in $1 million;

FEA = estimated foreign exchange availability in $1 million as derived from part 1 of the formula;

CFI_{jB} = commercial food imports of commodities in group j during the base period in $1 million (sources: FAO and ERS);

MEE_B = merchandise export earnings during the base period in $1 million (sources: IMF and World Bank) minus debt-service payments for the base year, and

B = the base period over which CFI and MEE are averaged (in this report, 1979-82).

This method projects the ability of a country to purchase food imports, based on the percentage of export earnings spent on food imports during the base period.

To continue the illustration with Columbia for the food group consisting of cereals, and roots and tubers, where:

$$FEA = 1982$$

$$CFI_jB = 138.6$$

$$MEEB = 2712$$

$$(8)\quad CICV_j = 1982 * \frac{(138.6)}{2712}$$

$$(9)\quad CICV_j = 1982 * (.051)$$

$$(10)\quad CICV_j = 101.$$

Equation (9) indicates that Colombia spent roughly 5.1 percent of its export earnings on imports of cereals, and roots and tubers during the base period. It is expected that the same percentage, or $101 million, of its availabile foreign exchange will be committed to import food staples in 1983/84.

A few shortcomings of this method should be noted. Countries that historically have spent a greater share of export earnings on food imports continue spending the same share in forecast years. In contrast, countries that spend relatively little on food continue spending that lower ratio.

Furthermore, countries whose base-period reserves-to-imports ratio is high may accumulate reserves at a faster rate than countries with a lower ratio. Finally, because debt-service figures include expected payments only on the debt that has already been contracted, forecasts of debt service may be understated.

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